

SERVICE MANUAL

DA-4 CHASSIS

<u>MODEL NAME</u>	<u>REMOTE COMMANDER</u>	<u>DESTINATION</u>	<u>CHASSIS NO.</u>
KV-27HS420	RM-Y197	US	SCC-S66P-A
KV-27HS420	RM-Y197	CANADA	SCC-S70N-A
KV-29DRC420	RM-Y197	LATIN NORTH	SCC-S71L-A
KV-29DRC420	RM-Y197	LATIN SOUTH	SCC-S71M-A
KV-30HS420	RM-Y197	US	SCC-S66Q-A
KV-30HS420	RM-Y197	CANADA	SCC-S70P-A
KV-30HS420	RM-Y197	HAWAII	SCC-S69H-A
KV-32HS420	RM-Y197	US	SCC-S66R-A
KV-32HS420	RM-Y197	CANADA	SCC-S70Q-A
KV-34HS420	RM-Y197	US	SCC-S66S-A
KV-34HS420	RM-Y197	CANADA	SCC-S70R-A
KV-36HS420	RM-Y197	US	SCC-S66T-A
KV-36HS420	RM-Y197	CANADA	SCC-S70S-A
KV-36HS420	RM-Y197	HAWAII	SCC-S69J-A

This manual is for units starting with the following S/N's:

4,000,001 to 4,499,999

8,000,001 to 8,499,999

9,000,001 to 9,499,999

ORIGINAL MANUAL ISSUE DATE: 5/2004

 **UPDATED ITEM**

<u>REVISION DATE</u>	<u>SUBJECT</u>
5/2004	No revisions or updates are applicable at this time.
11/2004	Reissue entire manual.
12/2004	Corrected Self-Diagnostic Circuit Diagram - Replaced Page 9
7/2005	Added Serial Number range to Front Cover and History Information pages
	Corrected instructions for 2-1. Beam Landing - Replaced Page 22
	Corrected Block Diagram for HS Signal Flow - Replaced Page 62
	Corrected DZ Board Schematic Diagram (Page 1 of 2) - Replaced Page 65
	Corrected PN for AY Board for 36" model in Section 6: Exploded Views - Replaced Page 102
	Corrected PN for AY Board for 36" model in Section 7: Electrical Parts List - Replaced Page 120 & 121

TRINITRON® COLOR TELEVISION

SONY®

SERVICE MANUAL

DA-4 CHASSIS

<u>MODEL NAME</u>	<u>REMOTE COMMANDER</u>	<u>DESTINATION</u>	<u>CHASSIS NO.</u>
KV-27HS420	RM-Y197	US	SCC-S66P-A
KV-27HS420	RM-Y197	CANADA	SCC-S70N-A
KV-29DRC420	RM-Y197	LATIN NORTH	SCC-S71L-A
KV-29DRC420	RM-Y197	LATIN SOUTH	SCC-S71M-A
KV-30HS420	RM-Y197	US	SCC-S66Q-A
KV-30HS420	RM-Y197	CANADA	SCC-S70P-A
KV-30HS420	RM-Y197	HAWAII	SCC-S69H-A
KV-32HS420	RM-Y197	US	SCC-S66R-A
KV-32HS420	RM-Y197	CANADA	SCC-S70Q-A
KV-34HS420	RM-Y197	US	SCC-S66S-A
KV-34HS420	RM-Y197	CANADA	SCC-S70R-A
KV-36HS420	RM-Y197	US	SCC-S66T-A
KV-36HS420	RM-Y197	CANADA	SCC-S70S-A
KV-36HS420	RM-Y197	HAWAII	SCC-S69J-A

This manual is for units starting with the following S/N's:

4,000,001 to 4,499,999

8,000,001 to 8,499,999

9,000,001 to 9,499,999



KV-30HS420



RM-Y197

TRINITRON® COLOR TELEVISION

SONY®

TABLE OF CONTENTS

SECTION TITLE	PAGE	SECTION TITLE	PAGE
Specifications	4	SECTION 4: CIRCUIT ADJUSTMENTS.....	35
Warnings and Cautions	6	4-1. Setting Service Adjustment Mode	35
Safety Check-Out	7	4-1.1. Service Adjustment Mode In	35
Self-Diagnostic Function.....	8	4-1.2. Service Adjustment Mode Memory	35
SECTION 1: DISASSEMBLY.....	11	4-1.3. Reading the Memory	35
1-1. Rear Cover Removal.....	11	4-1.4. Adjusting the Picture.....	35
1-2. Chassis Assembly Removal.....	11	4-1.5. Resetting the Data	35
1-3. Service Position	11	4-1.6. Resetting the MID NVM Data	35
1-4. Picture Tube Removal.....	12	4-1.7. Resetting the System NVM Data	35
Anode Cap Removal Procedure.....	12	4-1.8. Copy Function.....	35
Cable Wire Dressing	13	4-2. Memory Write Confirmation Method	36
SECTION 2: SET-UP ADJUSTMENTS.....	22	4-3. Remote Adjustment Buttons and Indicators	36
2-1. Beam Landing	22	4-4. Service Data.....	37
2-2. V-PIN and V-CEN Adjustment	23	4-5. ID Map Table	60
2-3. Convergence.....	23	SECTION 5: DIAGRAMS.....	61
2-3.1. Vertical and Horizontal Static Convergence	23	5-1. Circuit Boards Location	61
2-3.2. Operation of BMC (Hexapole) Magnet	23	5-2. Printed Wiring Boards and	
2-3.3. TLH Plate Adjustment	23	Schematic Diagrams Information	61
2-3.4. Screen-Corner Convergence.....	24	5-3. Block Diagrams	62
2-3.5. Dynamic Convergence Adjustments.....	24	5-4. Schematics and Supporting Information	65
2-4. Focus Adjustment.....	25	DZ Board Schematic Diagram (1 of 2).....	65
2-4.1. Dynamic Focus/Dynamic Quadra-Pole Data	25	DZ Board Schematic Diagram (2 of 2).....	66
2-5. Screen (G2).....	26	UY Board Schematic Diagram	69
2-6. Picture Quality Adjustments	26	HBV Board Schematic Diagram	70
2-6.1. Video Input - Sub Contrast Adjustment.....	26	AY Board Schematic Diagram (1 of 2)	73
2-6.2. Video Input - Sub Hue/Sub Color Adjustment.....	27	AY Board Schematic Diagram (2 of 2)	74
2-6.3. RF Input - Sub Contrast Adjustment.....	27	HGX Board Schematic Diagram.....	77
2-6.4. RF Input - Sub Hue/Sub Color Adjustment	28	CH Board Schematic Diagram	79
2-7. White Balance (CRT) and Sub Bright Adjustment.....	28	HAX Board Schematic Diagram	81
2-7.1. Color Offset Adjustment Procedure	28	WY Board Schematic Diagram	82
2-8. H Raster Center Adjustment	29	BY Board Schematic Diagram (1 of 4).....	84
2-9. Picture Distortion Adjustments	29	BY Board Schematic Diagram (2 of 4).....	85
2-9.1. NTSC (DRC) Full Mode Adjustment	29	BY Board Schematic Diagram (3 of 4).....	86
2-9.2. 1080i HD Mode Adjustment.....	30	BY Board Schematic Diagram (4 of 4).....	87
2-9.3. Vertical Compressed Mode Check and Confirmation		MY Board Schematic Diagram (1 of 4)	88
(For 4x3 CRT Only)	30	MY Board Schematic Diagram (2 of 4)	89
2-9.4. Normal, Zoom and Wide Zoom modes	30	MY Board Schematic Diagram (3 of 4)	90
SECTION 3: SAFETY RELATED ADJUSTMENTS.....	31	MY Board Schematic Diagram (4 of 4)	91
3-1. Preparation Before Confirmation.....	31	P Board Schematic Diagram	94
3-1.1. Hold-Down Operation Confirmation.....	31	PA Board Schematic Diagram	95
3-2. B+ Max Confirmation	31	5-5. Semiconductors (1 of 2).....	96
3-3. B+ Voltage Check	31	Semiconductors (2 of 2).....	97
3-4. High Voltage (HV) Check	31	SECTION 6: EXPLODED VIEWS.....	98
3-5. Preparation for HV and Ik Protector Check.....	31	6-1. Chassis (KV-27HS420/29DRC420)	98
3-6. HV Protector Check	31	6-2. Picture Tube (KV-27HS420/29DRC420)	99
3-6.1. Cut Off Condition	31	6-3. Chassis (KV-30HS420/34HS420)	100
3-6.2. High Light Condition	32	6-4. Picture Tube (KV-30HS420/34HS420).....	101
3-7. Ik Protector Check.....	32	6-5. Chassis (KV-32HS420/36HS420)	102
3-8. Hold Down Check	32	6-6. Picture Tube (KV-32HS420/36HS420).....	103
3-9. Restoration.....	32	SECTION 7: ELECTRICAL PARTS LIST.....	104
3-10. HV Service Flowchart.....	33		
HV Service Flowchart Table	34		

SPECIFICATIONS

	KV-29DRC420	KV-27HS420	KV-30HS420	KV-32HS420	KV-34HS420	KV-36HS420
Power Requirements	220V, 50-60Hz	120V, 60Hz				
Number of Inputs/Outputs						
Video ¹⁾	4	4				
S Video ²⁾	3	3				
Y,PB, PR ³⁾	2	2				
Audio ⁴⁾	7	7				
Audio Out ⁵⁾	1	1				
Monitor Out	1	1				
Control-S (In/Out)	YES	YES				
Memory Stick	NO	NO				
Speaker Output (W)	10W x 2	10W x 2	10W x 2	10W x 2	10W x 2	
Power Consumption (W)						
In Use (Max)	240W	240W				
In Standby	1W	1W				
Dimensions (W x H x D)						
mm	784 x 601.5 x 520 mm	784 x 601.5 x 520 mm	898 x 604 x 564.5 mm	898 x 698 x 598 mm	994 x 654 x 604 mm	994 x 776.5 x 634 mm
in	30 ^{7/8} x 23 ^{5/8} x 20 ^{1/2} in	30 ^{7/8} x 23 ^{5/8} x 20 ^{1/2} in	35 ^{3/8} x 23 ^{3/4} x 22 ^{1/4} in	35 ^{3/8} x 27 ^{1/2} x 23 ^{1/2} in	39 ^{1/8} x 25 ^{3/4} x 23 ^{3/4} in	39 ^{1/8} x 30 ^{5/8} x 25 in
Mass						
kg	50.2 kg	50.2 kg	68 kg	74.8 kg	88 kg	104.3 kg
lbs	111 lbs	111 lbs	150 lbs	165 lbs	194 lbs	230.0 lbs

- 1) 1 Vp-p 75 ohms unbalanced, sync negative
2) Y: 1 Vp-p 75 ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal), 75 ohms
3) Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative;
P_B: 0.7 Vp-p, 75 ohms
P_R: 0.7 Vp-p, 75 ohms
4) 500 mVrms (100% modulation), Impedance: 47 kilohms
5) More than 408 mVrms at the maximum volume setting (variable)
More than 408 mVrms (fix), Impedance (output): 2 kilohms

TruSurround™ by SRS (SRS)®

TruSurround is a trademark of SRS Labs, Inc. SRS and the SRS symbol are registered trademarks of SRS Labs, Inc. in the United States and in select foreign countries. SRS and TruSurround are incorporated under license from SRS Labs, Inc. and are protected under United States Patent Nos. 4,748,669 and 4,841,572 with numerous additional issued and pending foreign patents. Purchase of this product does not convey the right to sell recordings made with the TruSurround technology.

● SRS (SOUND RETRIEVAL SYSTEM)

The ● SRS (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pending.

The word 'SRS' and the SRS symbol ● are registered trademarks of SRS Labs, Inc. BBE and BBE symbol are trademarks of BBE Sound, Inc. and are licensed by BBE Sound, Inc. under U.S. Patent No. 4,638,258 and 4,482,866.

Television system

American TV standard, NTSC

Channel coverage

VHF: 2-13/ UHF: 14-69/ CATV: 1-125

Picture tube

FD Trinitron[®] tube

Visible screen size

27-inch picture measured diagonally (KV-27HS420/29DRC420 Only)

30-inch picture measured diagonally (KV-30HS420 Only)

32-inch picture measured diagonally (KV-32HS420 Only)

34-inch picture measured diagonally (KV-34HS420 Only)

36-inch picture measured diagonally (KV-36HS420 Only)

Actual screen size

29-inch measured diagonally (KV-27HS420/29DRC420 Only)

32-inch measured diagonally (KV-30HS420 Only)

34-inch measured diagonally (KV-32HS420 Only)

36-inch measured diagonally (KV-34 HS420 Only)

38-inch measured diagonally (KV-36HS420 Only)

Antenna

75 ohm external terminal for VHF/UHF

Supplied Accessories

Remote Commander RM-Y197

Two Size AA (R6) Batteries

Optional Accessories

AV Cable: VMC-810/820/830 HG

Audio Cable: RKC-515HG

Component Video Cable: VMC-10/30 HG

TV Stand: SU-27HX1 (KV-27HS420/29DRC420 Only)

TV Stand: SU-30HX1 (KV-30HS420 Only)

TV Stand: SU-32HX1 (KV-32HS420 Only)

TV Stand: SU-34HX1 (KV-34HS420 Only)

TV Stand: SU-36HX1 (KV-36HS420 Only)

WARNINGS AND CAUTIONS

CAUTION


Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield, or carbon painted on the CRT, after removing the anode.

WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the ac power line.



SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and  mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.


ATTENTION!!

Après avoir déconnecté le cap de l'anode, court-circuiter l'anode du tube cathodique et celui de l'anode du cap au châssis métallique de l'appareil, ou la couche de carbone peinte sur le tube cathodique ou au blindage du tube cathodique.

Afin d'éviter tout risque d'électrocution provenant d'un châssis sous tension, un transformateur d'isolement doit être utilisé lors de tout dépannage. Le châssis de ce récepteur est directement raccordé à l'alimentation du secteur.



ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifiés par une trame et par une marque  sur les schémas de principe, les vues explosées et les listes de pièces sont d'une importance critique pour la sécurité du fonctionnement. Ne les remplacer que par des composants Sony dont le numéro de pièce est indiqué dans le présent manuel ou dans des suppléments publiés par Sony. Les réglages de circuit dont l'importance est critique pour la sécurité du fonctionnement sont identifiés dans le présent manuel. Suivre ces procédures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecté.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or touching high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

Leakage Test

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson's 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

How to Find a Good Earth Ground

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble-light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

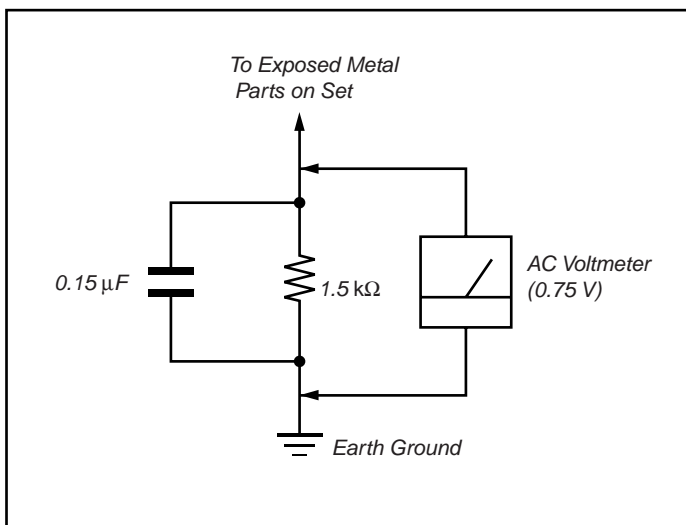


Figure A. Using an AC voltmeter to check AC leakage.

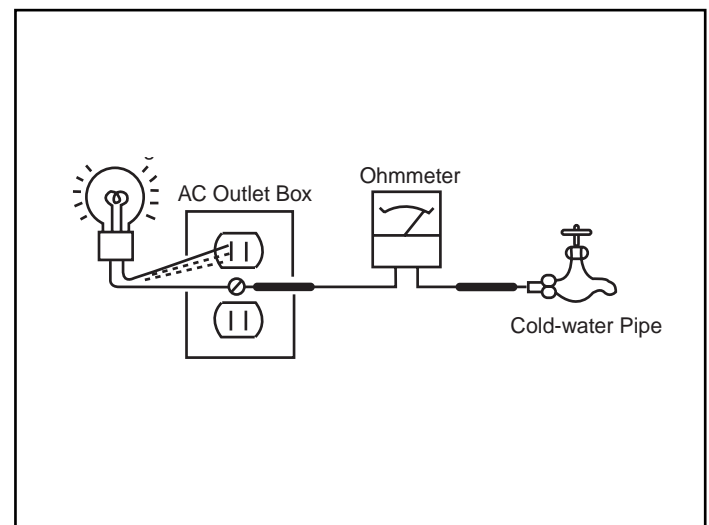


Figure B. Checking for earth ground.

SELF-DIAGNOSTIC FUNCTION



The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER LED flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the Remote Commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

Diagnostic Test Indicators

When an error occurs, the STANDBY/TIMER LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas.

Results for all of the following diagnostic items are displayed on screen. If the screen displays a "0", an error has occurred.

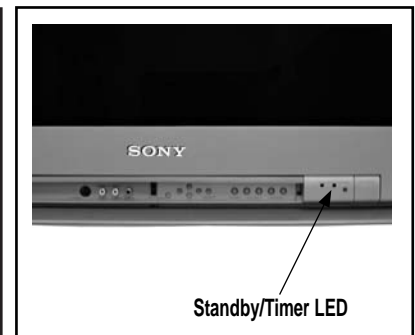
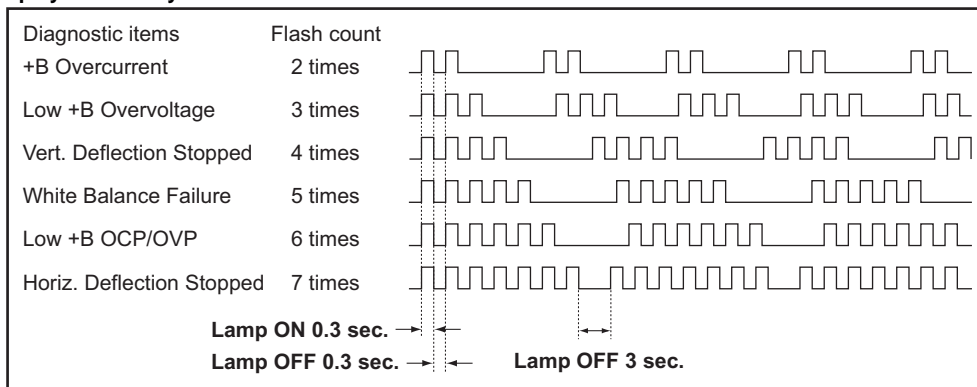
Diagnostic Item	No. of times STANDBY / TIMER lamp flashes	Display Result	Probable Cause Location	Detected Symptoms
Power does not turn on	Does not light	—	<ul style="list-style-type: none"> Power cord is not plugged in. Fuse is burned out (F501). (AY Board) 	<ul style="list-style-type: none"> Power does not come on. No power is supplied to the TV. AC Power supply is faulty.
+B Overcurrent (OCP)*	2 times	2:0 or 2:1	<ul style="list-style-type: none"> H.OUT (Q5030) is shorted. (DZ Board) +B PWM (Q5003) is shorted. (DZ Board) 	<ul style="list-style-type: none"> Power does not come on. Load on power line shorted.
Low +B Overvoltage (OVP)	3 times	3:0 or 3:1	<ul style="list-style-type: none"> IC6505 is faulty. (DZ Board) 	<ul style="list-style-type: none"> Has entered standby mode.
Vertical Deflection Stopped	4 times	4:0 or 4:1	<ul style="list-style-type: none"> 15V is not supplied. (DZ Board) IC5004 is faulty. (DZ Board) 	<ul style="list-style-type: none"> Has entered standby mode after Horizontal raster. Vertical deflection pulse is stopped. Power line is shorted or power supply is stopped.
White Balance Failure (not balanced)	5 times	5:0 or 5:1	<ul style="list-style-type: none"> Video OUT (IC9001-IC9003) is faulty. (CH, Board) CRT drive (IC2801) is faulty. (BY Brd.) G2 is improperly adjusted.** 	<ul style="list-style-type: none"> No raster is generated. CRT cathode current detection reference pulse output is small.
LOW +B OCP/OVP (overcurrent/overvoltage)***	6 times	6:0 or 6:1	<ul style="list-style-type: none"> +5 line is overloaded. (AY, BY, MY Boards) +5 line is shorted. (AY, BY, MY Brds.) IC504 is faulty. (AY Board) 	<ul style="list-style-type: none"> No picture
Horizontal Deflection Stopped	7 times	7:0 or 7:1		<ul style="list-style-type: none"> No picture

* If a +B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously. The symptom that is diagnosed first by the microcontroller is displayed on the screen.

** Refer to Screen (G2) in Section 2-5 of this manual.

*** If STANDBY/STEREO LED flashes six (6) times, unplug the unit and wait 10 seconds before performing the adjustment.

Display of Standby/Timer LED Flash Count



* One flash count is not used for self-diagnostic.

Stopping the Standby/Timer LED Flash

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER LAMP from flashing.

Self-Diagnostic Screen Display

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurrences of failure on the screen for confirmation.

To Bring Up Screen Test

In standby mode, press buttons on the Remote Commander sequentially, in rapid succession, as shown below:

DISPLAY ➡ Channel **5** ➡ Sound volume **[-]** ➡ Power ON.

SELF DIAGNOSIS

2: +B OCP 0

3: +B OVP 0

4: VSTOP

5: AKB

6: LOWB

7: H-STOP 0

101: WDT 24

0

Numeral “0”

means that no fault was detected.

1

Numeral “1”

means a fault was detected one time only.

Handling of Self-Diagnostic Screen Display

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to “0”.

Unless the result display is cleared to “0”, the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

Clearing the Result Display

To clear the result display to “0”, press buttons on the Remote Commander sequentially when the diagnostic screen is displayed, as shown below:

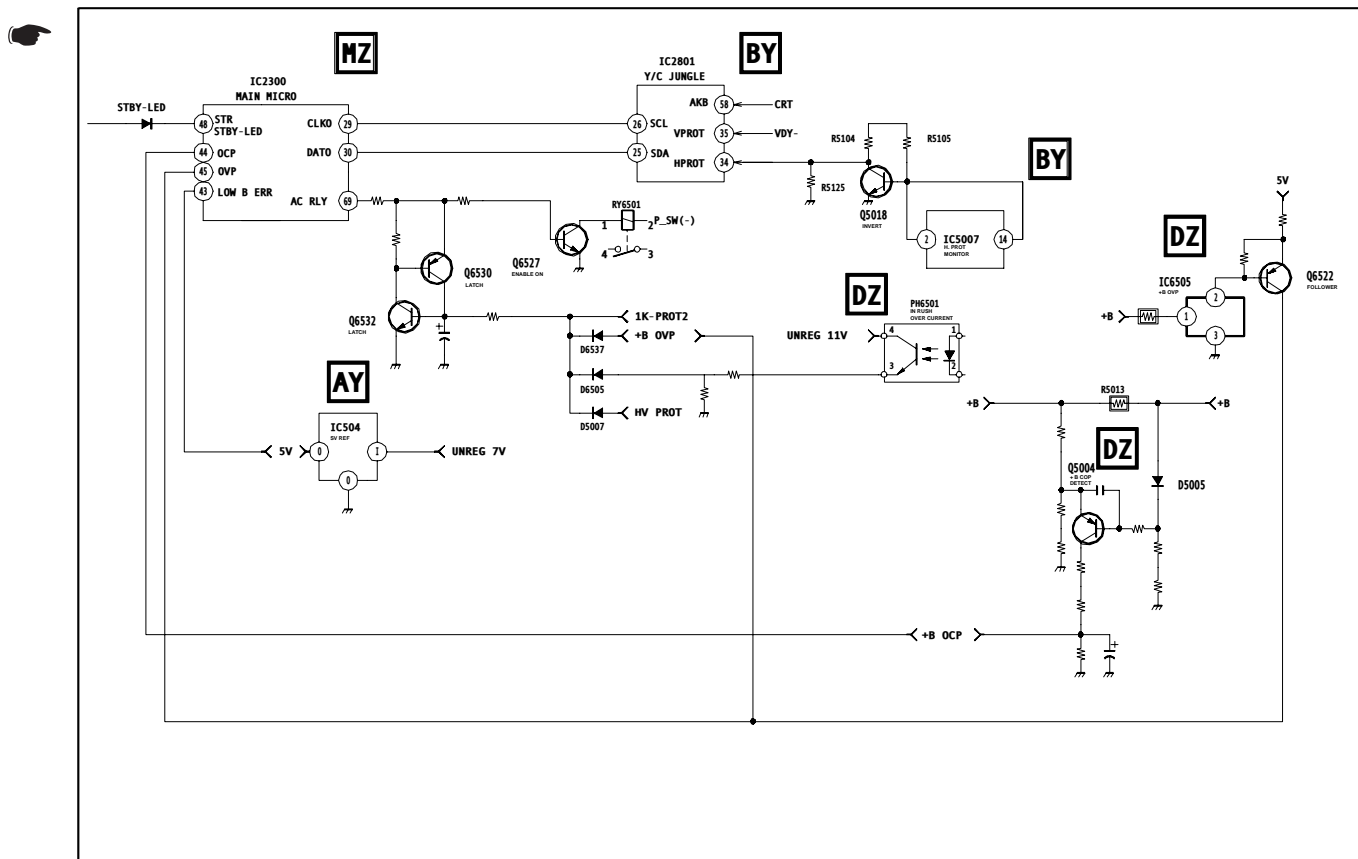
NOTE: This will also reset all user functions (including auto programming and picture settings)

Channel **8** ➡ **ENTER**

Quitting the Self-Diagnostic Screen

To quit the entire self-diagnostic screen, turn off the power switch on the Remote Commander or the main unit.

Self-Diagnostic Circuit



+B overcurrent (OCP)

Occurs when excessive current flows through R5013. The increase in voltage across R5013 causes the output of Q5004 to go high, and this high signal goes to the micro.

+B overvoltage (OVP)

IC6505 detects +B OVP condition and turns on Q6522. This sends a high signal to the micro and also shuts down the AC relay.

V-STOP

Occurs when an absence of the vertical deflection pulse is detected by pin 24 of IC2801 (BY Board). Power supply will shut down when waveform interval exceeds 2 seconds.

White Balance Failure

If the RGB levels* do not balance within 2 seconds after the power is turned on, this error will be detected by IC2801. TV will stay on, but there will be no picture.

*(Refers to the RGB levels of the AKB detection Ref pulse that detects 1K).

Low B OCP/OVP

Occurs when set 5V is out.

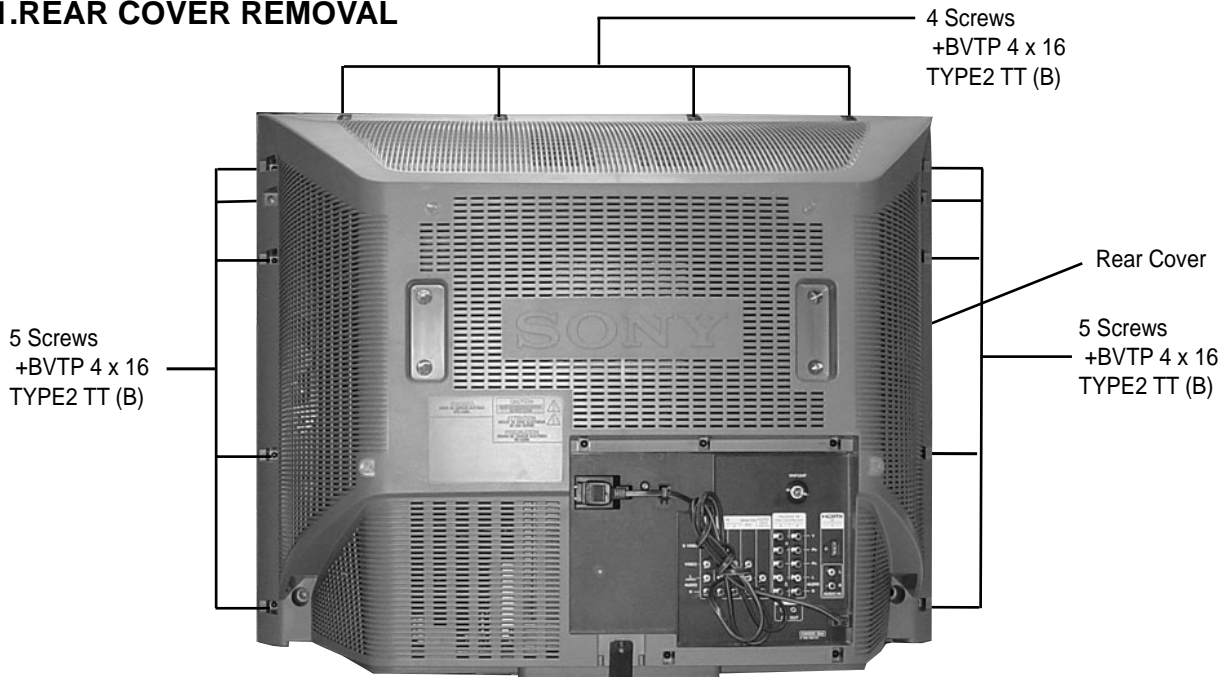
Horizontal Deflection Stopped

Occurs when either:

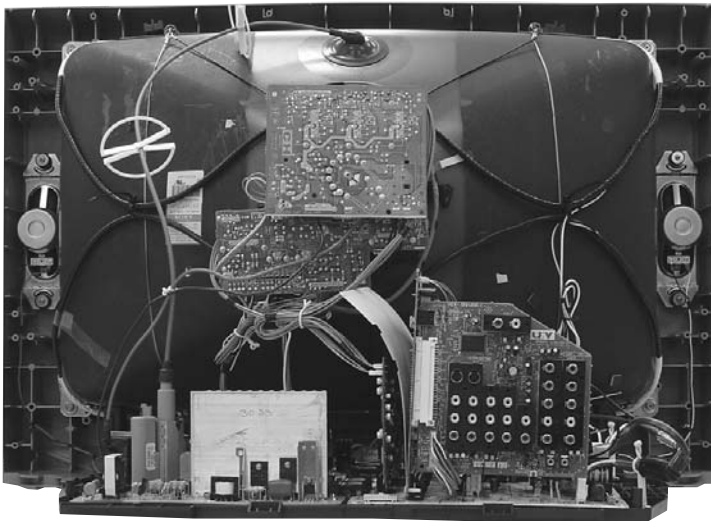
- 1) a +B overcurrent is detected (IC5007), or
- 2) overheating is detected (Thermistor TH5002).

SECTION 1: DISASSEMBLY

1-1.REAR COVER REMOVAL

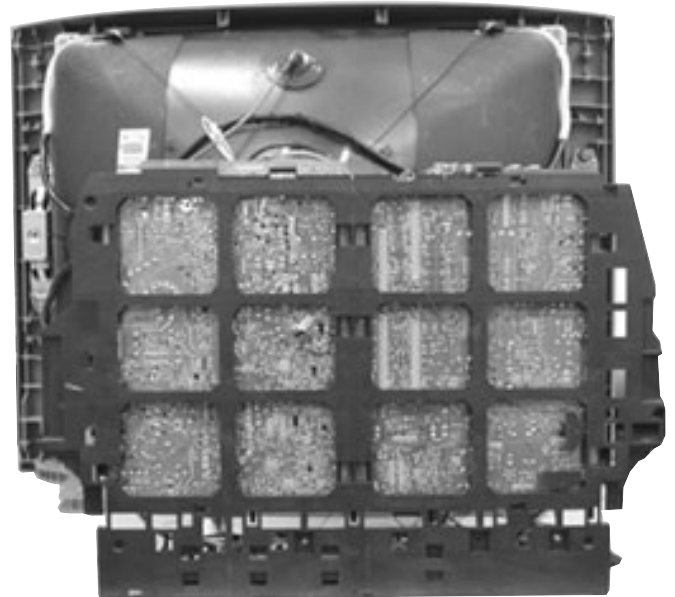


1-2.CHASSIS ASSEMBLY REMOVAL



- ① Lift lever up on the right and left sides of the chassis bracket and gently pull the chassis assembly away from the bezel.

1-3.SERVICE POSITION



CAUTION! - Heat sink on IC5004 is -15V. Do not to allow heat sink to touch GND or any other components.

Heat sink on Q8018 VpK=250V. Do not touch or short to GND or other components.

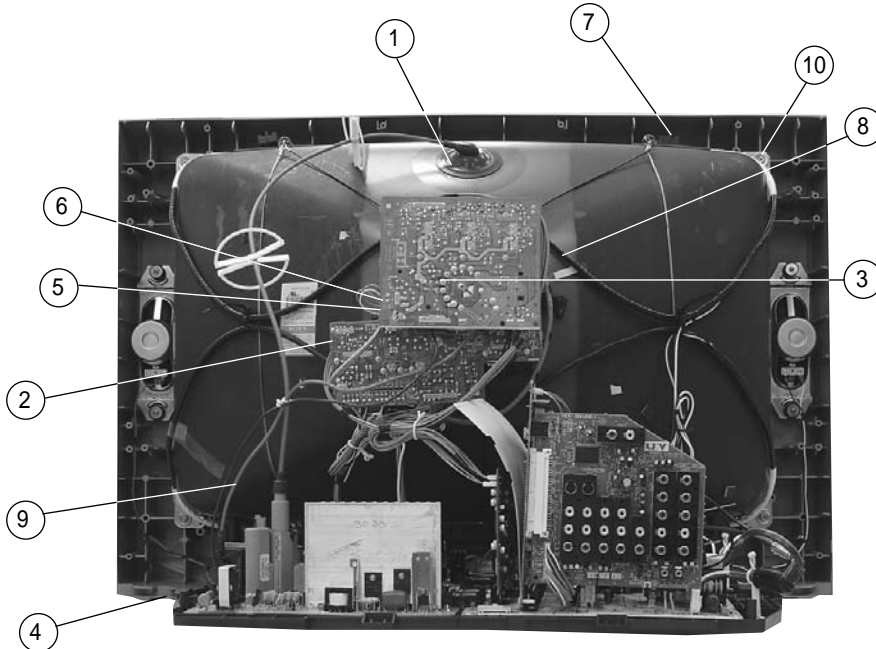
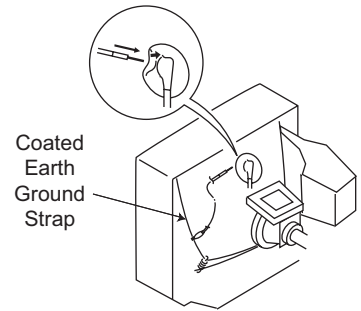
CAUTION! - Pay attention to Neck Assembly WY Board wire harness to BY Board. The WY Board can easily break if there is sudden or excessive tension on the harness.

- ① Lift lever up on the right and left sides of the chassis bracket and gently pull the chassis assembly away from the bezel.
- ② Pull up and rotate both the AY and DZ Boards in order to service the unit.

1-4. PICTURE TUBE REMOVAL

WARNING: BEFORE REMOVING THE ANODE CAP

High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT before attempting to remove the anode cap. Short between anode and CRT coated earth ground strap.



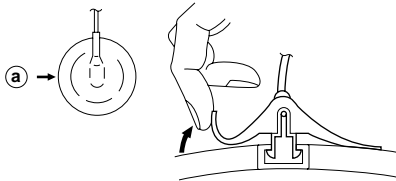
1. Discharge the anode of the CRT and remove the anode cap.
2. Unplug all interconnecting leads from the deflection yoke, neck assembly, degaussing coils and CRT grounding strap.
3. Remove the CH Board from the CRT.
4. Remove the chassis assembly.
5. Loosen the neck assembly fixing screw and remove.
6. Loosen the deflection yoke fixing screw and remove.
7. Place the set with the CRT face down on a cushion and remove the degaussing coil holders.
8. Remove the degaussing coils.
9. Remove the CRT grounding strap and spring tension devices.
10. Unscrew the four CRT fixing screws [located on each CRT corner] and remove the CRT [Take care not to handle the CRT by the neck].

ANODE CAP REMOVAL PROCEDURE

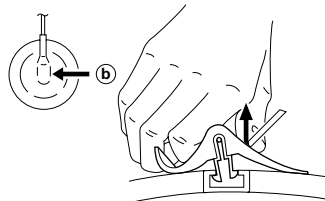
WARNING: High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT before attempting to remove the anode cap. After removing the anode cap, short circuit to either the metal chassis, CRT shield, or carbon painted on the CRT.

NOTE: After removing the anode cap, short circuit the anode of the picture tube and the anode cap to either the metal chassis, CRT shield or carbon painted on the CRT.

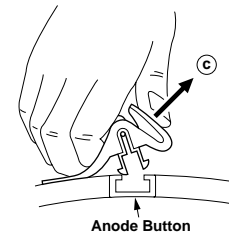
REMOVAL PROCEDURES



Turn up one side of the rubber cap in the direction indicated by arrow a .



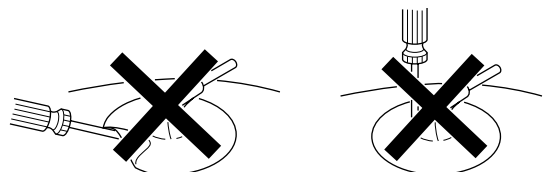
Use your thumb to pull the rubber cap firmly in the direction indicated by arrow b .



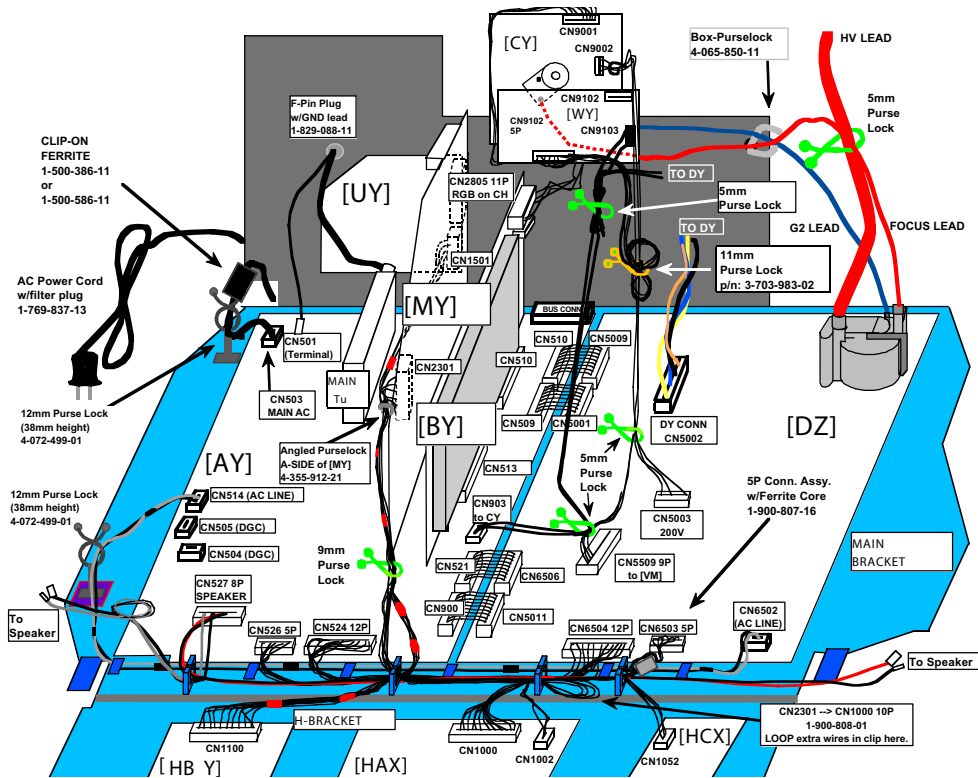
When one side of the rubber cap separates from the anode button, the anode cap can be removed by turning the rubber cap and pulling it in the direction of arrow c .

HOW TO HANDLE AN ANODE CAP

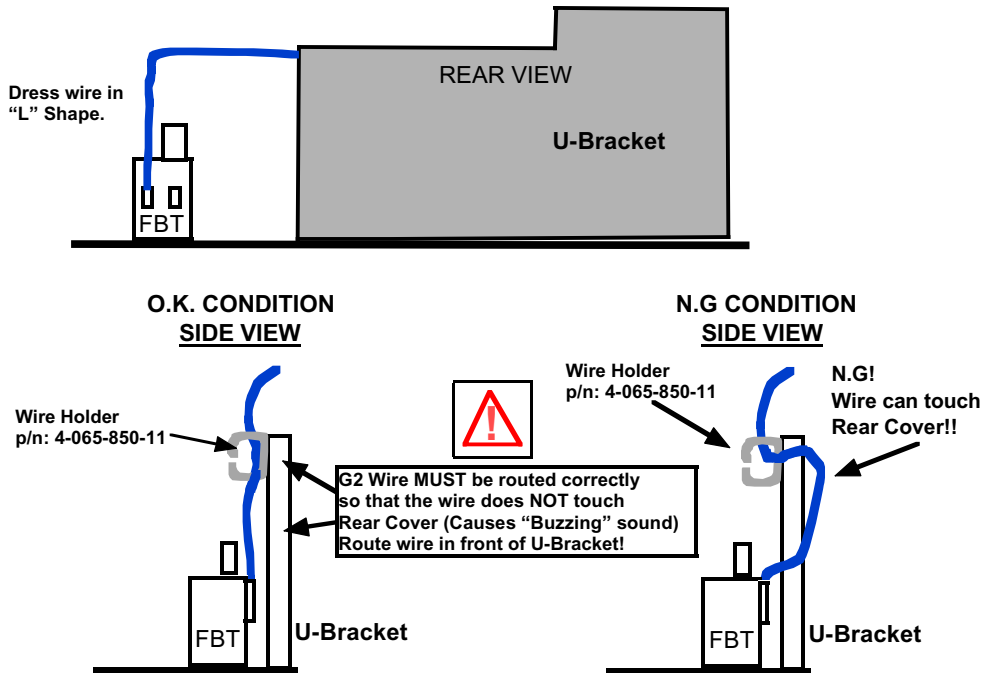
1. Do not use sharp objects which may cause damage to the surface of the anode cap.
2. To avoid damaging the anode cap, do not squeeze the rubber covering too hard. A material fitting called a shatter-hook terminal is built into the rubber.
3. Do not force turn the foot of the rubber cover. This may cause the shatter-hook terminal to protrude and damage the rubber.



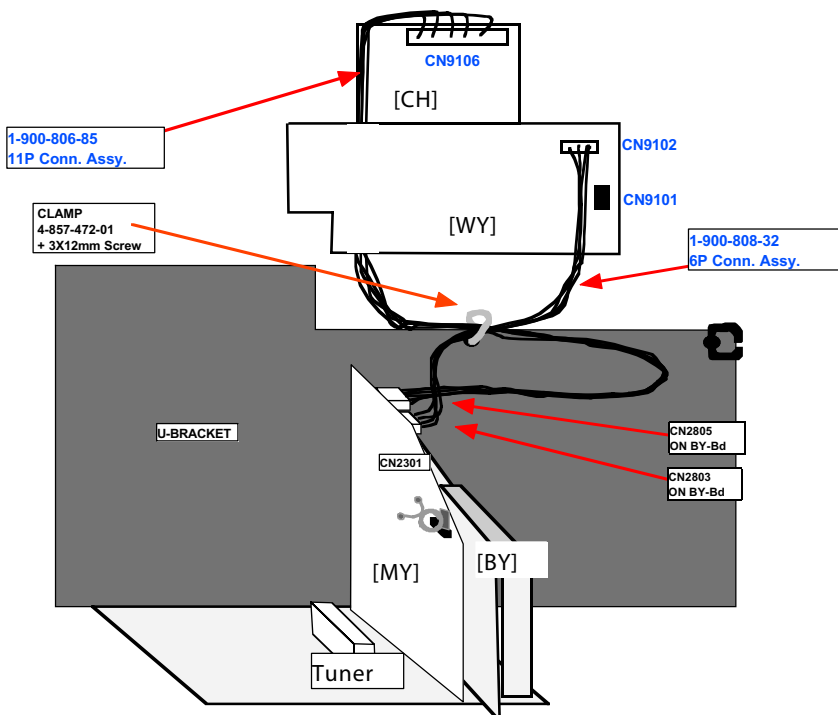
CHASSIS ASSEMBLY (ALL EXCEPT KV-29DRC420)

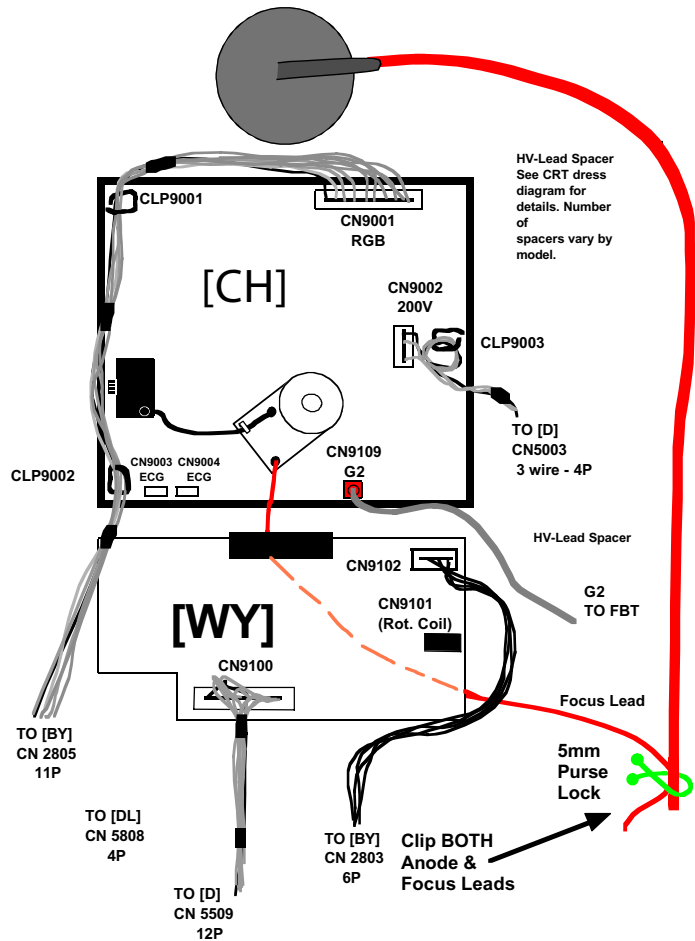
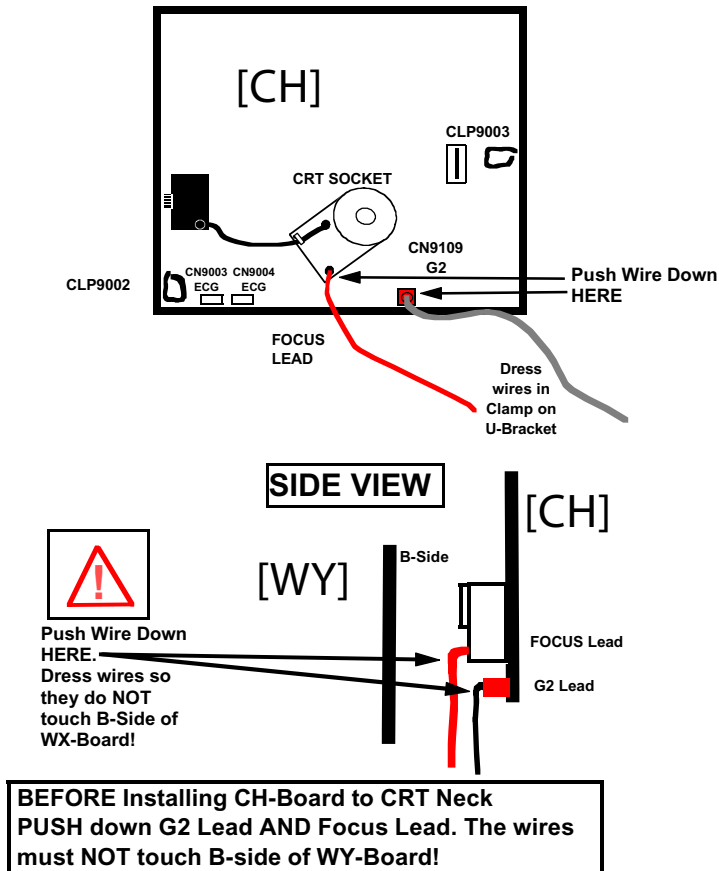


G2 WIRE ROUTING CAUTION POINT

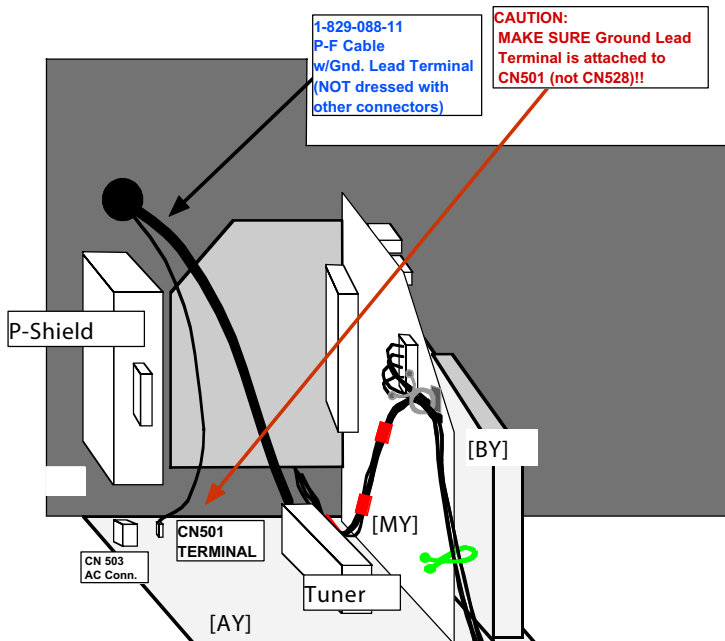


BY BOARD WIRE DRESSING

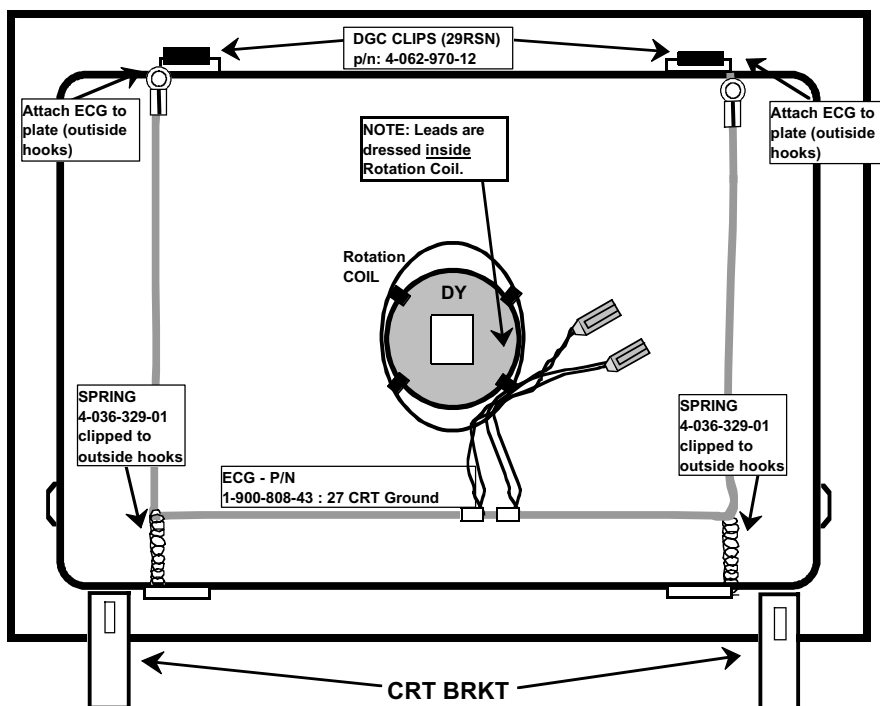


G2 & FOCUS LEAD WIRE DRESSING**CAUTION POINT****[CH] [/WY] [/HV]**

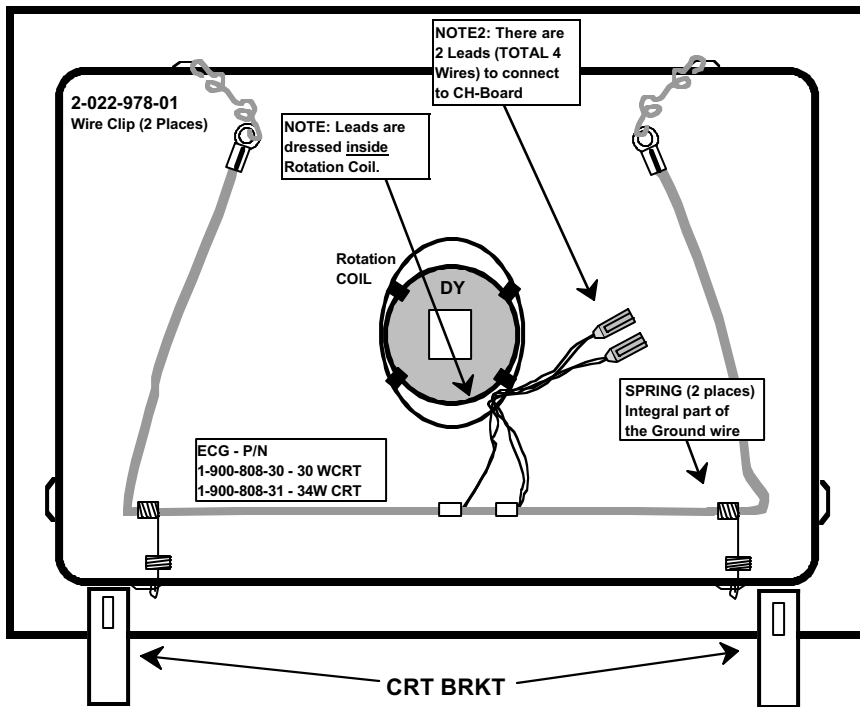
F-PIN CABLE WIRE DRESSING



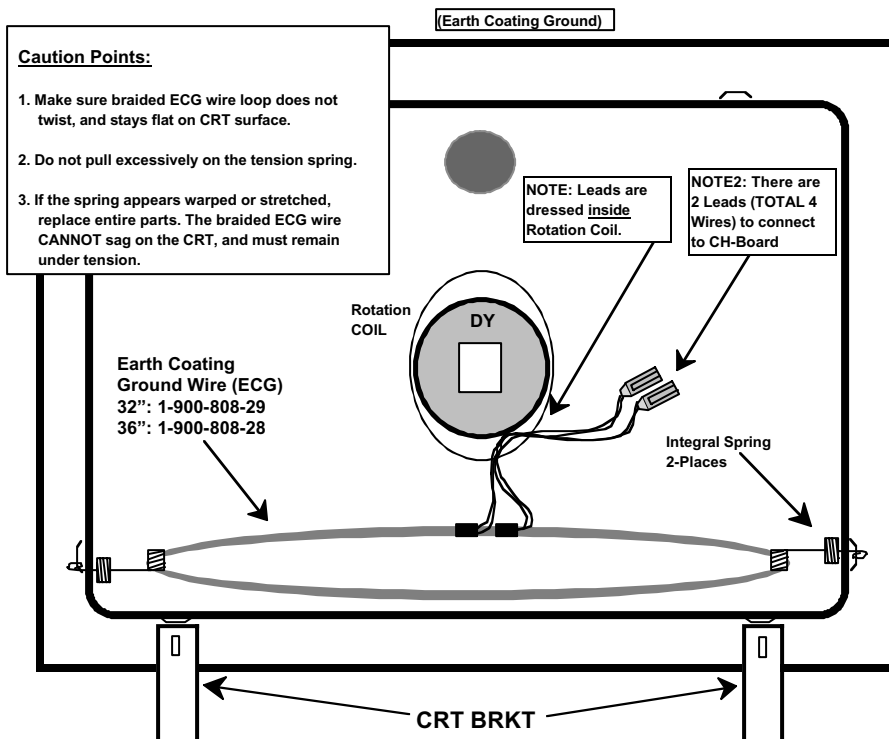
ECG WIRE DRESSING (KV-27HS420 ONLY)



ECG WIRE DRESSING (KV-30HS420/34HS420 ONLY)



ECG WIRE DRESSING (KV-32HS420/36HS420 ONLY)

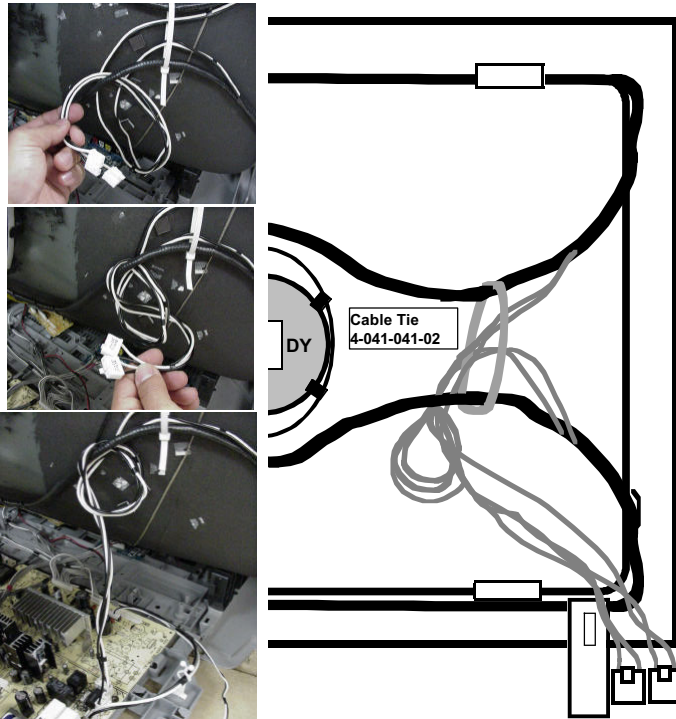


DGC LEAD WIRE DRESSING (ALL EXCEPT KV-29DRC420)

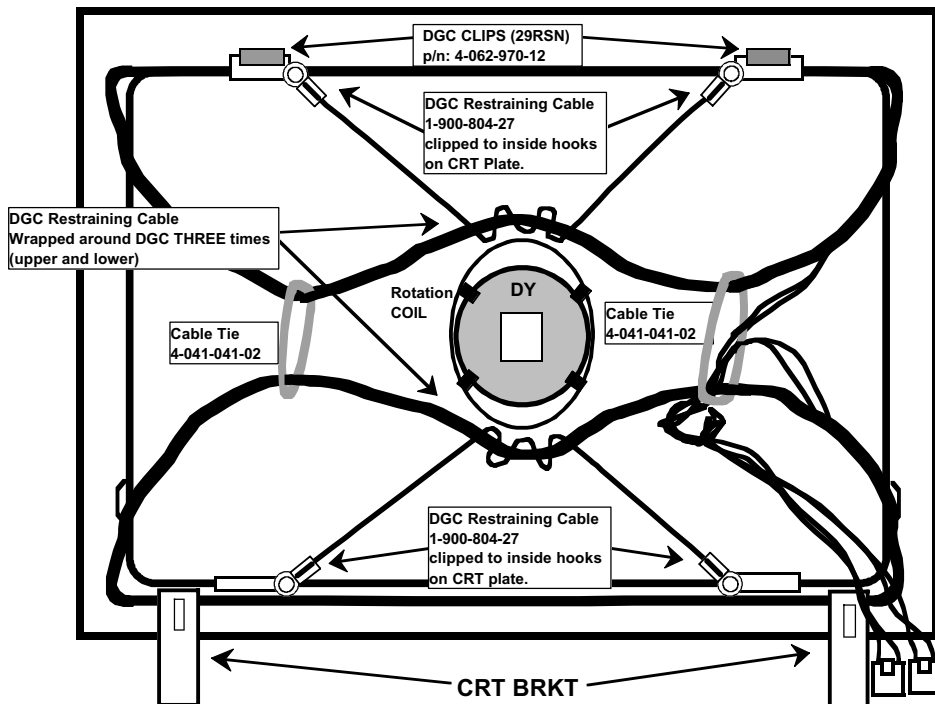
STEP 1:
Make a loop in leads
and route loop **BEHIND**
The DGC Coil.

STEP 2:
Thread both connector
housings through the
loop in lead wires.

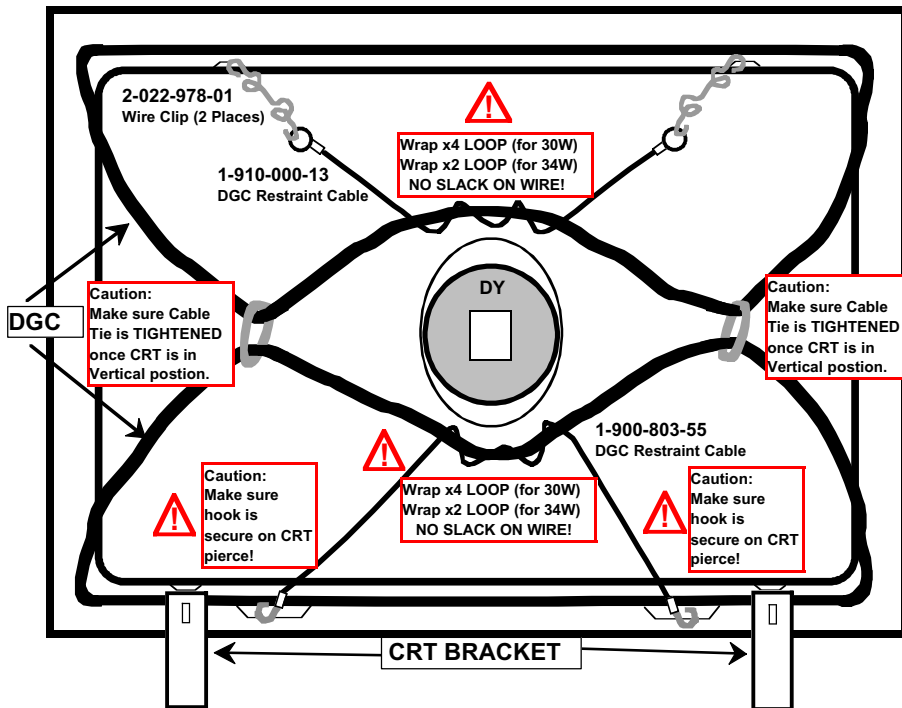
STEP 3:
Plug in connector
housings into the
[AY] Board using the
loop to take up slack.



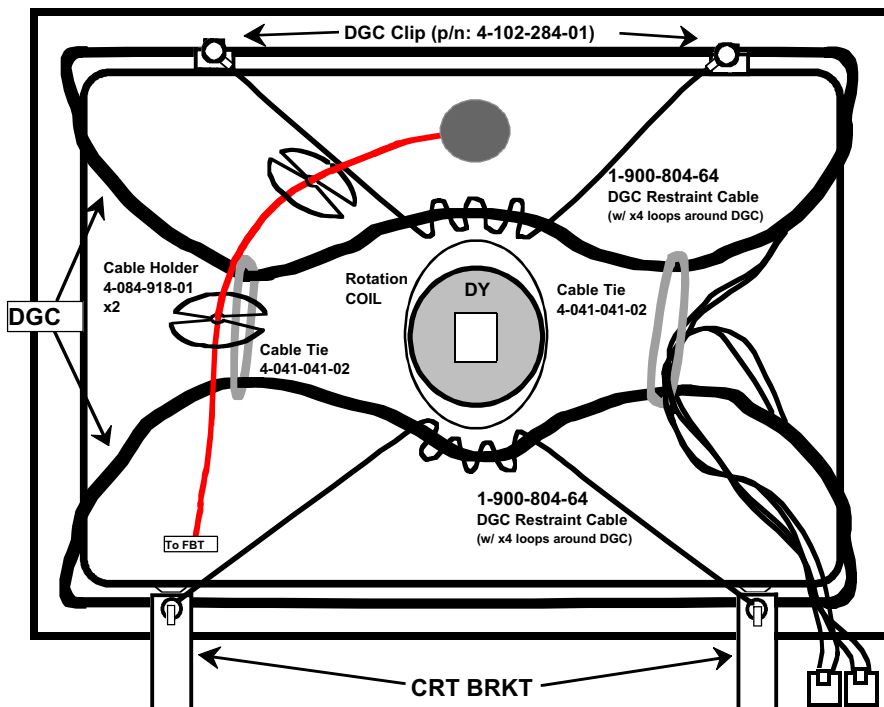
DGC WIRE DRESSING (KV-27HS420 ONLY)

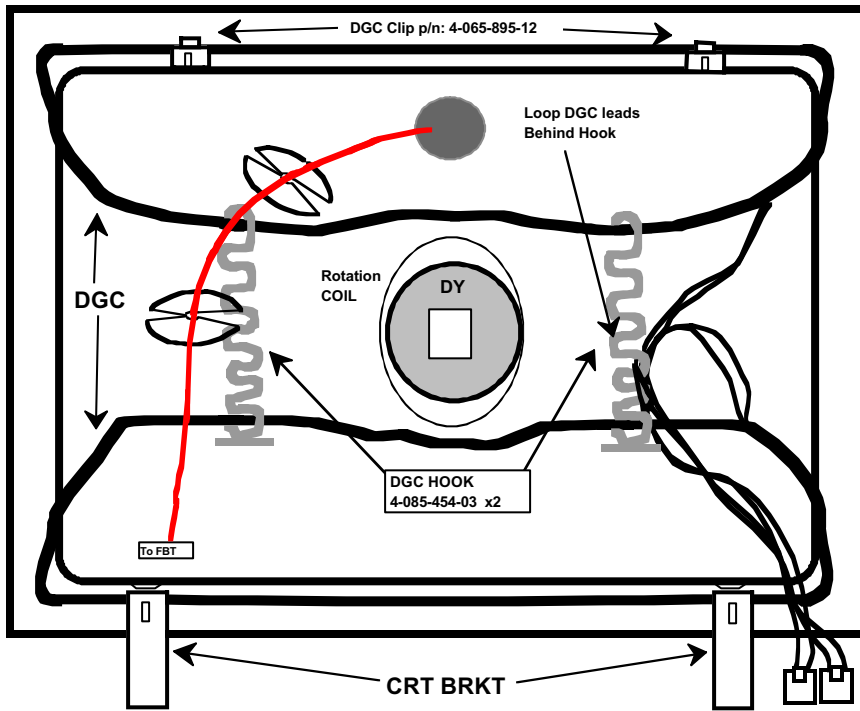
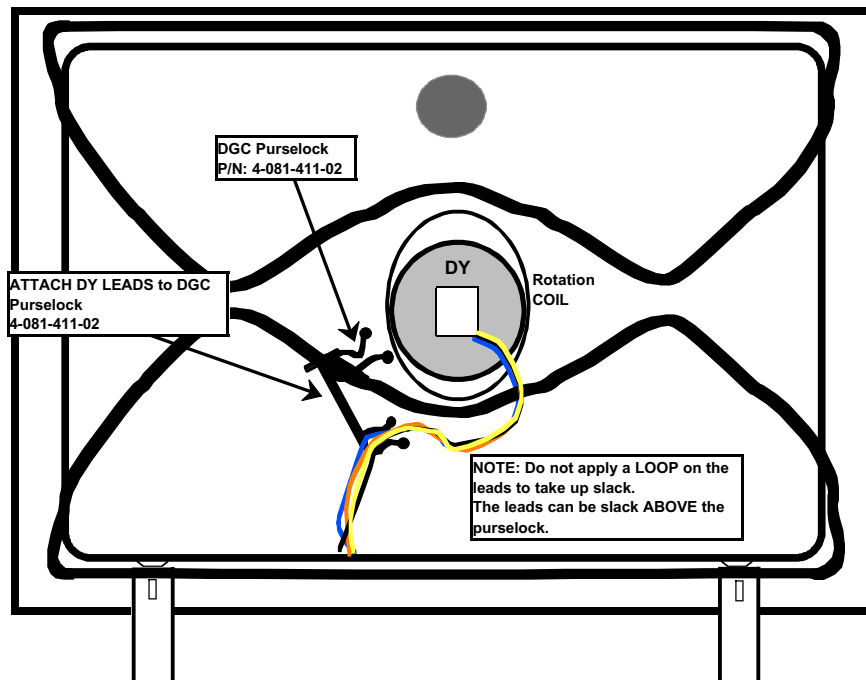


DGC ASSEMBLY CAUTION POINT (KV-30HS420/34HS420 ONLY)

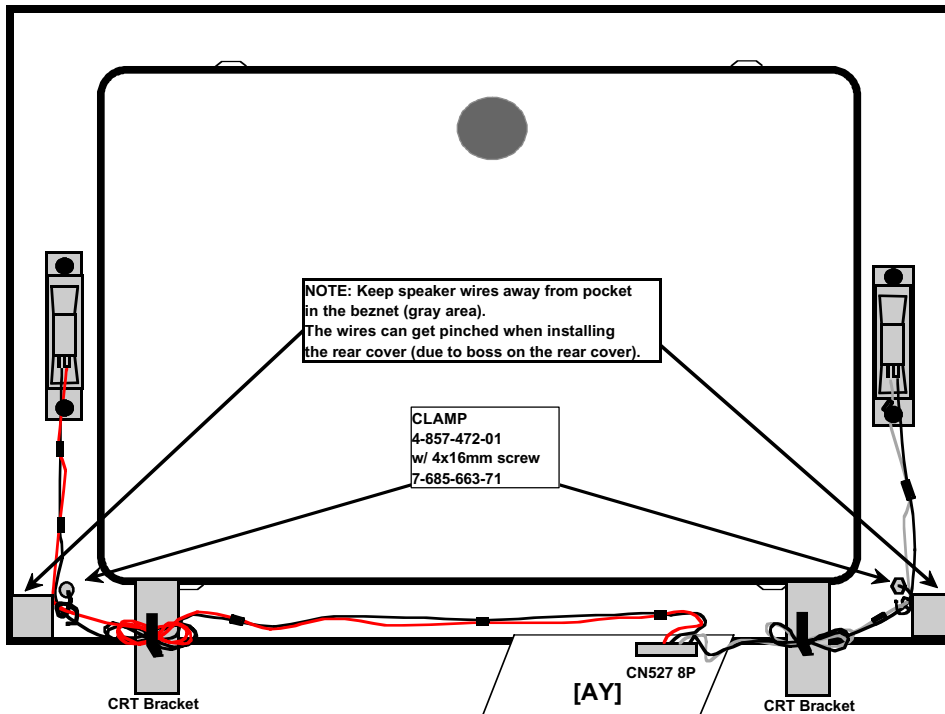


CRT WIRE DRESSING (KV-32HS420 ONLY)

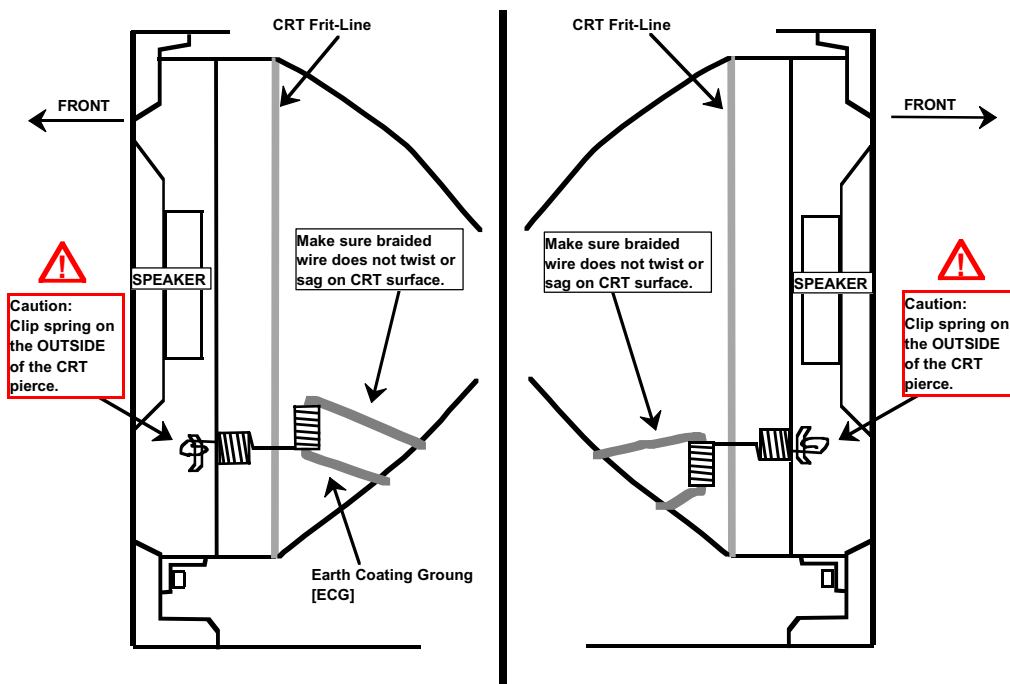


WIRE DRESSING (US/CND) (KV-36HS420 ONLY)**DY LEAD DRESSING (ALL EXCEPT KV-29DRC420)**

SPEAKER ASSEMBLY WIRE DRESSING (ALL EXCEPT KV-29DRC420)



ECG ASSEMBLY CAUTION POINT (ALL EXCEPT KV-29DRC420)



SECTION 2: SET-UP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and switch should be set as follows unless otherwise noted:

VIDEO MODE: STANDARD (RESET)

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G2)
5. White Balance

Test Equipment Required:

1. Color Bar Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital Multimeter

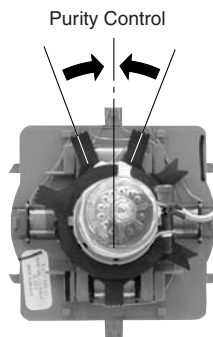
2-1.BEAM LANDING

Preparation:

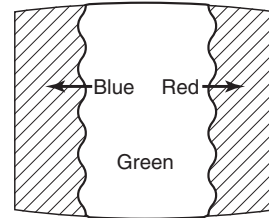
- Use cross hatch signal to rough adjust focus, G2 and then input a white pattern signal.
- Face the picture tube in an East or West direction to reduce the influence of geomagnetism.
- CXA2170-D4 Confirm Focus data - See 2.4.1 Dynamic Focus/ Dynamic Quadrapole Data Table 1.
- CXA8070 (Should be set to default) - or unplug CN1 from DY.
CXA8070 default (initial) data: (See 4-4. SERVICE DATA for the default data values for YBWU, YBWL, RSAP, RUBW, RUMB, RLBW, RLMB1, LSAP, LUBW, LUMB, LLBW, LLMB, CADJ, HVCA)
- CXA2170-D1, -D2 table default (initial) data: (See 4-4. SERVICE DATA for the default data values for VCEN, VPIN, HTPZ, HCNT, PPHA, VANG, VBOW, LBOW LANG)

Note: Do not use the hand degausser; it magnetizes the CRT .

1. Input white pattern from pattern generator. Set the PICTURE control to maximum, and the BRIGHTNESS control to standard.
2. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown below:

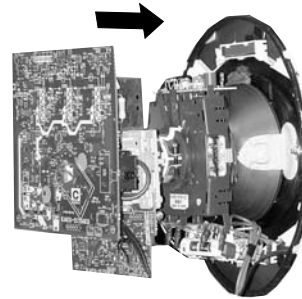


3. Input a green pattern from the pattern generator.
4. Move the deflection yoke backwards, (See Figure 1) and adjust with the purity control so that green is in the center and red and blue are even on both sides.

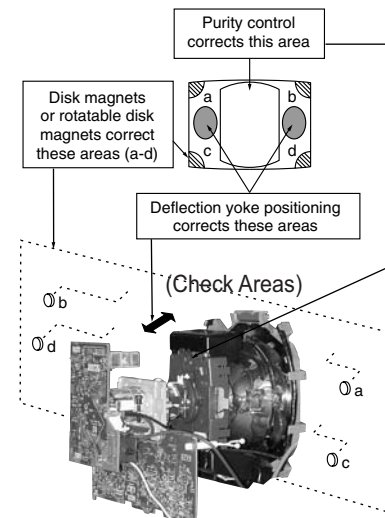


5. Move the deflection yoke forward, and adjust so that the entire screen becomes green.

Figure 1



6. Switch over the raster signal to red and blue and confirm the condition.
7. When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw.
8. If landing at the corner is not right, adjust it by using the disk magnets.



2-2.V-PIN AND V-CEN ADJUSTMENT

Preparation:

- Input a cross hatch pattern signal.
- Set Video Mode to: Standard (Reset)
- For all 4x3 CRT, VPIN data has separate register for full and V-compress. Adjust both modes if needed.
- For all 16x9 CRT's, adjust VPIN in normal mode for straightness of horizontal line.

1. Adjust service mode CXA2170D-1 05 V-CEN so that the top pin and bottom pin are symmetrical from top to bottom.
2. Adjust service mode CXA2170D-1 06 V-PIN so that the top pin and bottom pin are symmetrical from top to bottom.
3. Horizontal lines should be straight from left to right. Check landing for side effect.

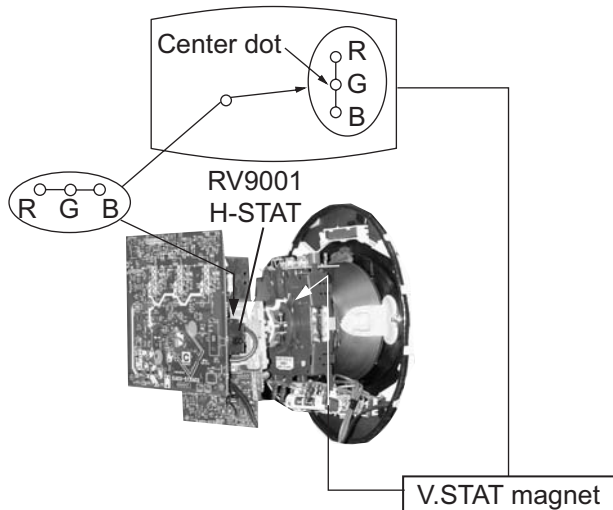
2-3.CONVERGENCE

Preparation:

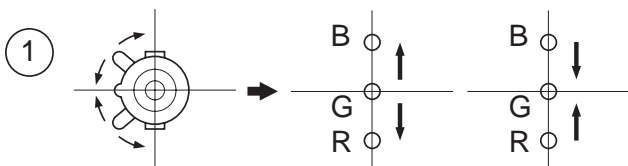
- Set the CONTRAST and BRIGHTNESS control to standard (reset).
- Input a cross hatch pattern signal.

2-3.1. VERTICAL AND HORIZONTAL STATIC CONVERGENCE

1. Set dynamic convergence to default values (as in 2-1 Beam Landing) or disconnect the dynamic convergence before adjusting static convergence (CN903), except for minor touch-up.
2. Adjust H.STAT convergence, RV9001, on CH Board to converge red, green, and blue dots in the center of the screen.
3. Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen.



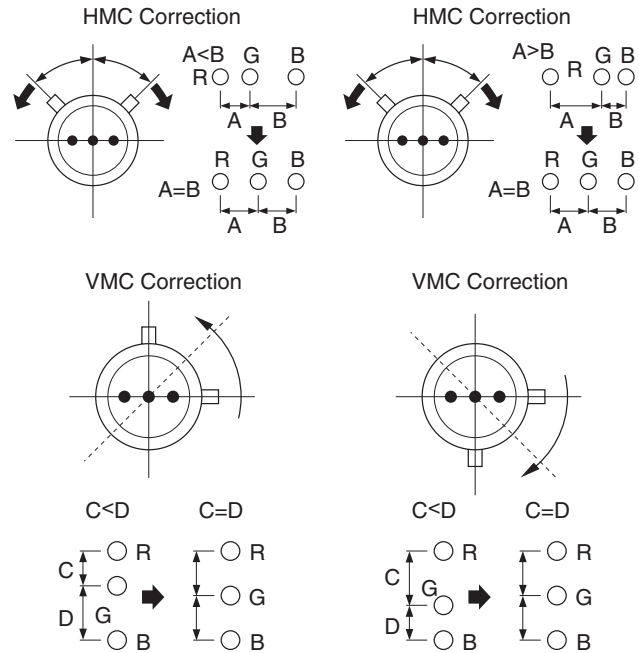
4. Tilt the V.STAT magnet and adjust static convergence to open or close the V.STAT magnet.



2-3.2. OPERATION OF BMC (HEXAPOLE) MAGNET

The respective dot positions result from moving each magnet interact. Perform the following adjustments while tracking.

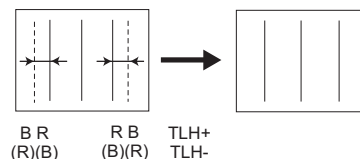
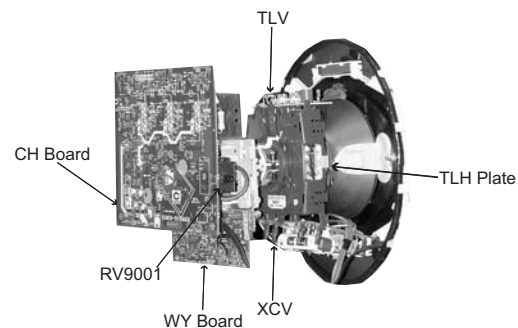
1. Use the BMC tabs to adjust the red, green and blue dots so that they line up at the center of the screen (move the dots in a horizontal direction).



2-3.3. TLH PLATE ADJUSTMENT

Preparation:

- Input a cross hatch pattern signal.
- Adjust unbalanced horizontal convergence of red and blue dots by adjusting the TLH Plate on the deflection yoke.



1. Adjust XCV core to balance X axis.
2. Adjust the vertical red and blue convergence with V.TILT (TLV VR).

Note: Perform adjustments while tracking Item 1.

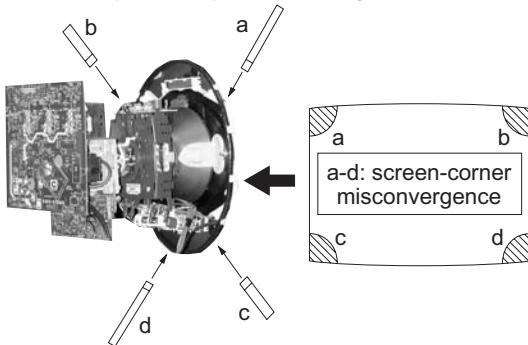
Note: Restore dynamic convergence when static convergence adjustments are complete.

2-3.4. SCREEN-CORNER CONVERGENCE

Preparation:

- Input a cross hatch pattern signal.

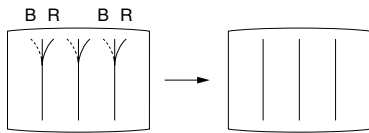
- Affix a permalloy assembly corresponding to the misconverged areas.



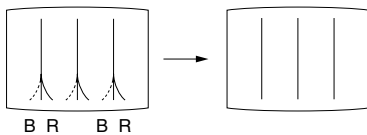
2-3.5. DYNAMIC CONVERGENCE ADJUSTMENTS

- Set dynamic convergence using the following service registers. Note areas of change.
- Only H-component can be corrected, for vertical component use permalloy to compensate.

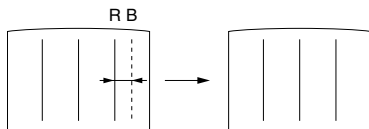
- YBWU (Upper Y-BOW)



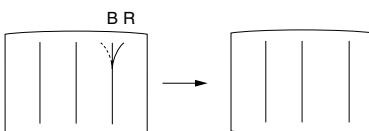
- YBWL (Lower Y BOW)



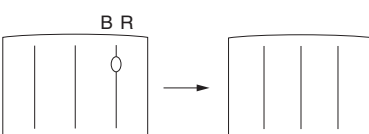
- RSAP (Right H AMP)



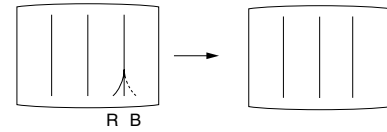
- RUBW (Right Upper BOW)



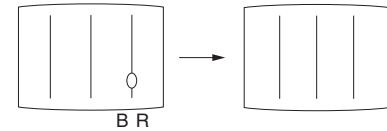
- RUMB (Right Upper Middle BOW)



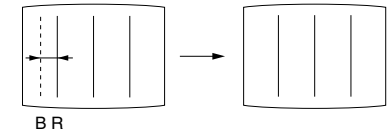
- RLBW (Right Lower BOW)



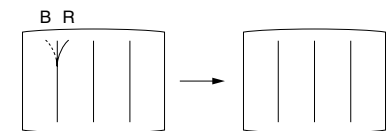
- RLMB (Right Lower Middle BOW)



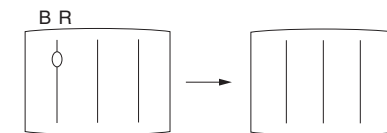
- LSAP (Left H AMP)



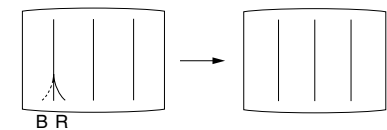
- LUBW (Left Upper BOW)



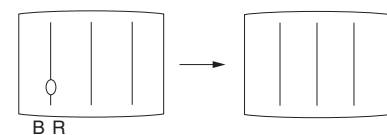
- LUMB (Left Upper Middle BOW)



- LLBW (Left Lower BOW)



- LLMB (Left Lower Middle BOW)



- CADJ Fix 29

2-4.FOCUS ADJUSTMENT

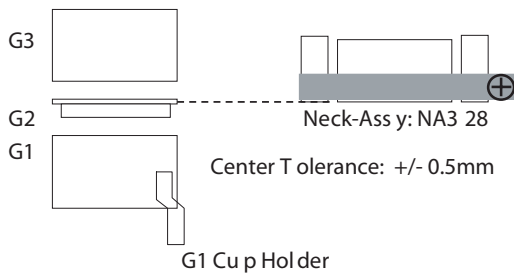
Confirm neck assembly Z axis position. (See Figure 1)

1. Input a dot signal.
2. Set Video Mode to STANDARD.
3. Adjust focus VR counter clockwise (Over-Focus) to confirm the dot's shape. Center should be very slightly oval with left and right sides balanced.
4. Input a HD monoscope signal.
5. Confirm center focus with focus VR.

KV-32/34/36 HS420

CRT: 34RSN/36RV2/38RSN (NON-super-fine pitch and round fannel)

Neck Assy:NA328 (VA-type, square pin assignment, VPIN harness)



KV-27/30 HS420

CRT: 29RSN/32RVE (NON-Super-Fine Pitch)

Neck Assy:NA2920 (VA-Type, Square pin assignment, VPIN harness)

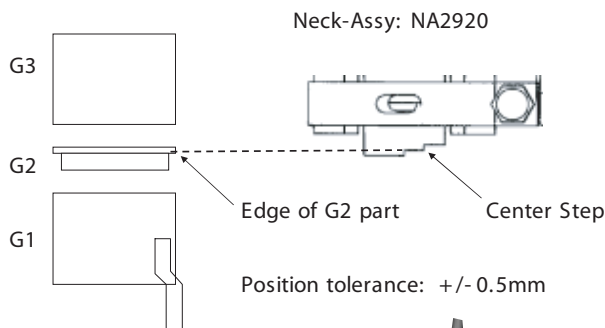
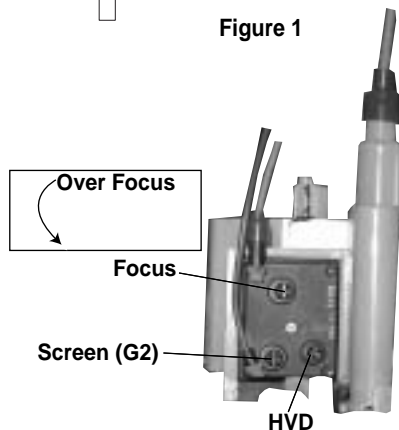
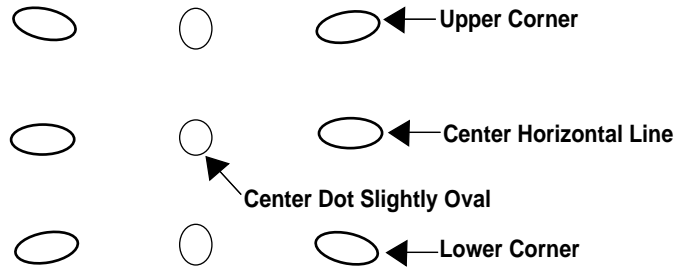


Figure 1



DQP Dot Pattern



Note: Changing neck assembly position will affect corner convergence.

2-4.1. DYNAMIC FOCUS/DYNAMIC QUADRA-POLE DATA

Normally, no adjustments are necessary for these systems. If for some reason the data is lost, use the data from Table 1 below:

1. Write the data from any non-vertically compressed mode, then use the CPY1 function (CXA2170D-4 Item 6) to copy the data to the vertical compressed modes.

Note: V-compressed data is identical to non-v-compressed data. Service personnel with a trained eye can adjust the DF or DQP registers to adjust DF phase (Item 7) or DQP phase (Item 8), respectively, to balance left and right focus. Refrain from adjusting more than 5 steps from table data below. Further adjustment indicates a circuit problem -- troubleshoot to cause.

CAUTION: Be sure that Neck Assembly is in the proper location. Mark position before moving or replacing neck assembly.

(See Section 2-4 Figure 1 - before changing DF/DQP data or troubleshooting circuit when DF/DQP is suspect.)

Procedure to adjust or check:

1. Short Q8018 B-Gnd to disable DF. B Mark is on the circuit board. Circuit connection changes should always be done with the power off.
CAUTION: Q8018 heatsink is live and peak voltage is 250V.
2. Input a cross hatch signal.
3. Change CXA2170-P2 item 2 RGBS to 2 to make green only.
 1. Overfocus to adjust DQP phase. Adjust the data (CXA2170-D4 item 8) to balance left and right vertical line width.
 2. Once DQP is balanced, remove the short from DF circuit and refocus the set.
 3. Adjust DF (CXA2170-D4 item 7) to balance left and right vertical line width.
 4. Reconfirm focus performance.

	27	30W	32	34W	36
QPAM	36	33	25	45	22
QPAV	44	46	40	47	40
QPAP	6	6	6	6	6
QPDC	22	29	17	42	17
QPDV	52	59	52	63	52
QPDP	6	6	6	6	6
DF	36	40	36	36	36
DQP	37	38	37	37	37

Table 1

2-5. SCREEN (G2)

1. Input composite white field into Video 1.
2. Set to service mode and adjust as follows:

(Fig. 1)	Opeartion Procedure	Standards	Notes
CXA2170P-2 PICO 1-> 0	<ol style="list-style-type: none"> 1) In Full mode, apply changes in Fig. 1 2) Mount G2 adjustment jig. Adjust Cathode voltage if the standard is not met. Standard varies by CRT size. 3) Adjust G2 by Flyback transformer (T8001). 4) Return data changes in 1) to original condition. 	170 +/- 5 (V _{DC}) 175 +/- 5 (V _{DC})	29RSN, 32RVEN 34RSN, 36RV2, 38RSN

2-6.PICTURE QUALITY ADJUSTMENTS

Preparation:

- Set PRO MODE (Reset).

1. Input signal (480i Composite):
 - Color Bar Video 75 IRE (White) 75% modulation 7.5% Set-up.
 - Color Bar RF 75 IRE (White) 75% modulation 7.5% Set-up.

2-6.1. VIDEO INPUT - SUB CONTRAST ADJUSTMENT

Preparation:

- Input a Color Bar signal to VIDEO 1 (75 IRE 75%).
- Set picture mode: Single (Full) (PRO MODE Reset).
- Picture: Max
- Color: Min

1. Set to Service Mode and adjust as follows:

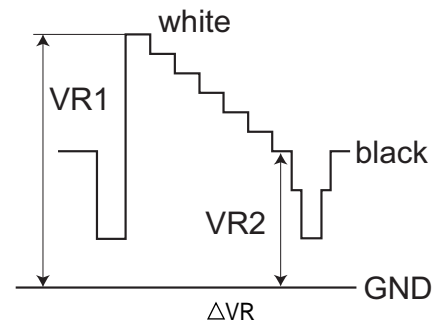
2170P-2

NO.	Name	Control Function	Avg. Data
01	RGBS	R ON	4

2. Connect oscilloscope to Pin 1 of CN9001 (R.DRV) on the CH Board.
3. Adjust contrast according to the service mode item: SPIO.

2103-1

NO.	Name	Control Function
02	SCON	SUB-CONT



- (27HS/29DRC) = 1.84 ± 0.05 Vpp
 (30HS) = 1.92 ± 0.05 Vpp
 (32HS) = 1.92 ± 0.05 Vpp
 (34HS) = 1.92 ± 0.05 Vpp
 (36HS) = 2.00 ± 0.05 Vpp

4. Write data from Step 3 above, into memory.

2-6.2. VIDEO INPUT - SUB HUE/SUB COLOR ADJUSTMENT

Preparation:

- Input a Color Bar signal to VIDEO 1 (75 IRE 75%).
- Set picture mode: Single (Full) (PRO MODE Reset).
- Picture: Max

1. Set to Service Mode and adjust as follows:

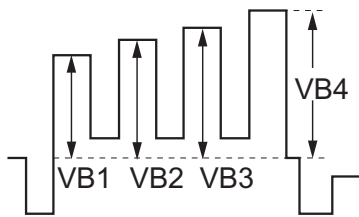
2170P-2

NO.	Name	Control Function	Avg. Data
01	RGBS	R ON	7

2. Connect an oscilloscope to Pin 5 of CN9001 (B. DRV) on the CH Board.
3. Adjust color according to Service Mode for SCLO.
4. Adjust color according to Service Mode for SHUO.

2103-1

NO.	Name	Control Function
03	SCOL	SUB-COL
04	SHUE	SUB-HUE



COLOR: $VB1 \leq VB4$ ($\approx 20\text{mV} \pm 200\text{ mV}$)

HUE: $VB2 \leq VB3$ ($\approx 20\text{mV} \pm 200\text{ mV}$)

5. Write data into memory.

2-6.3. RF INPUT - SUB CONTRAST ADJUSTMENT

Preparation:

- Input a Color Bar signal to RF (75 IRE 75%).
- Set picture mode: Single (Full) (PRO MODE).
- Picture: Max
- Color: Min

1. Set to Service Mode and adjust as follows:

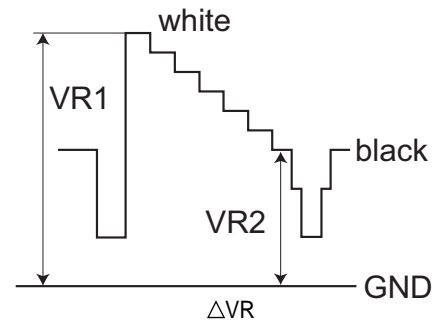
2170P-2

NO.	Name	Control Function	Avg. Data
01	RGBS	R ON	4

2. Connect an oscilloscope to Pin 1 of CN9001 (R. DRV) on the CH Board.
3. Adjust contrast according to service mode for SCON.

2103-1

NO.	Name	Control Function
02	SCON	SUB-CONT



(27HS/29DRC) = $1.84 \pm 0.05\text{ Vpp}$

(30HS) = $1.92 \pm 0.05\text{ Vpp}$

(32HS) = $1.92 \pm 0.05\text{ Vpp}$

(34HS) = $1.92 \pm 0.05\text{ Vpp}$

(36HS) = $2.00 \pm 0.05\text{ Vpp}$

4. Write data from Step 3 above, into memory.

2-6.4. RF INPUT - SUB HUE/SUB COLOR ADJUSTMENT

Preparation:

- Input a Color Bar signal to RF (75 IRE 75%).
- Set picture mode: single (FULL) (PRO MODE Reset).
- Picture: Max

1. Set to Service Mode and adjust as follows:

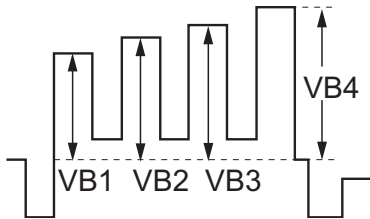
2170P-4

NO.	Name	Control Function	Avg. Data
01	RGBS	R ON	7

2. Connect an oscilloscope to pin 5 of CN9001 (B. DRV) on the CH Board.
3. Adjust color according to Service Mode for SCOL.
4. Adjust color according to Service Mode for SHUE.

2103-1

NO.	Name	Control Function
03	SCOL	SUB COLOR
04	SHUE	SUB HUE



COLOR: $VB1 \leq VB4$ ($=20\text{mV} \pm 200 \text{ mV}$)
 HUE: $VB2 \leq VB3$ ($=20\text{mV} \pm 200 \text{ mV}$)

5. Write data into memory.

2-7. WHITE BALANCE (CRT) AND SUB BRIGHT ADJUSTMENT

Preparation

- Input an all white 480i (15.734 KHz) signal into the VIDEO 1 input terminal to perform the White Balance (highlight, cut-off) adjustments. The parameters to adjust are in the CXA2170P1 in Service Mode.
- Set Picture Mode: Single (FULL) (PRO MODE Reset)
- Picture: Max
- Color: Min

WHITE BALANCE ADJUSTMENT PROCEDURE (Composite White Field Signal into Video 1)					
Specification	<div><div>Old Calibration Highlight/Cutoff 9300K + 8MPCD (R/G 1.000, B/G 1.000)</div><div>New Calibration Highlight/Cutoff 10,900K + 2MPCD (R/G 1.007, B/G 1.139)</div></div>		WB701 Preset	R/G B/G	.790 .903
				29RSN/29RSEN	.790 .903
				32RVE/32RV	.775 .915
				34RSN	.689 .883
				36RV2	.745 .905
Condition	<div>Picture Mode: Single (Full) Picture Setting: Pro</div> <div>Color Temp: Neutral</div> <div>Picture: 63 write to 86h:01h:FFh Color: 0 write to 86h:03h:00h</div>	Adjustment Registers (Service Mode)	RDRV (fixed)**	2170P-1-06	
			GDRV	2170P-1-0	
			BDRV	2170P-1-08	
			RCUT fixed**	2170P-1-09	
			GCUT	2170P-1-10	
			BCUT	2170P-1-11	
			** Data will differ by model		

2-7.1. COLOR OFFSET ADJUSTMENT PROCEDURE

Preparation:

- Input an all white (30 IRE) signal to the specified input.
- Adjust the white balance using the specified registers.
- Set picture mode: Single (FULL) (PRO MODE Reset)
- Color: Max

VIDEO 1

CXA2170P1

NO.	Name	Control Function
3	CBOF	CB OFFSET
4	CROF	CR OFFSET

VIDEO 5

CXA2170P1

NO.	Name	Control Function
3	CBOF	CB OFFSET
4	CROF	CR OFFSET

VIDEO 7 - HDMI 480i Signal

CXA2170P1

NO.	Name	Control Function
3	CBOF	CB0F (FROM VIDEO 5) + 3
4	CROF	CR0F (FROM VIDEO 5) - 4

2-8.H RASTER CENTER ADJUSTMENT

Preparation:

- Input a monoscope signal.
- Set to NTSC (DRC) mode.

1. Set to Service Mode and adjust as follows:

CXA2170P-2

NO.	Name	Control Function	Data
05	AGNG	AGING 1, AGING 2	2

CXA2170D-2

NO.	Name	Control Function	Avg. Data
01	HPOS	Horiz Position	34
02	HSIZ	Horiz Size	34

CXA2170D-3

NO.	Name	Control Function	Avg. Data
00	HBLK	Blanking Enable	0

2. Reduce HSIZ to see sides of raster. (See Figure A)
3. Adjust H-Center with CXA2170D-2.
4. Adjust to the best screen position with H-CENT and write data.
5. Restore aging, HSIZ and HBLK to original condition.

Raster Edge Equal:

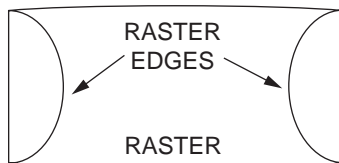


Figure A

2-9.PICTURE DISTORTION ADJUSTMENTS

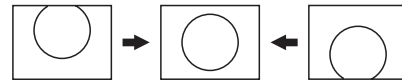
2-9.1. NTSC (DRC) FULL MODE ADJUSTMENT

1. Face the picture tube in an east-west direction. (For best condition.)
2. Input a monoscope and crosshatch signal.
3. Adjust the picture distortion with these two signals to balance the best condition between the two.
Use the CXA2170-D1 and -D2 adjustable data items shown here.
4. Complete V-PIN and V-CEN adjustments first and adjust HPTZ to straighten and parallel top and bottom lines.
5. Adjust VSCO, VLIN as necessary.
6. Adjust VSIZ and VPOS and write the data.
7. Adjust for Vertical line distortion.
8. Adjust VANG, VBOW, LANG, LBOW. Keep LANG and LBOW data between 5 and 58.
9. Finish with UCP, LCP, PPHA, PIN adjustments. Check SLIN, MPIN.
10. Adjust for correct HSIZ and HPOS and write the data before changing modes.

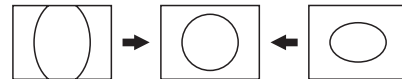
Note: Make sure that the picture size is within specs. Vertical size is 11.8 ± 0.1 sq. and horizontal size is 15.8 ± 0.1 sq.

CXA2170D-1

- Item 0. VPOS (V-POSITION)



- Item 1. VSIZ (V-SIZE)



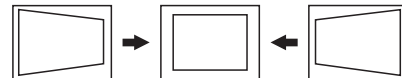
- Item 3. VLIN (V-LINEARITY)



- Item 4. VSCO (V S-CORRECTION)

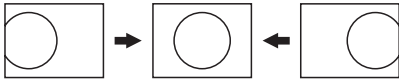


- Item 9. HTPZ (H-TRAPEZOID)

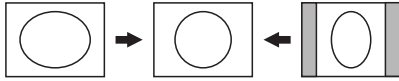


CXA2170D-2

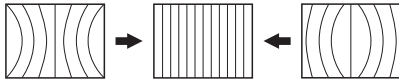
Item 1. HPOS (H-POSITION)



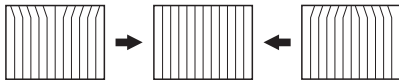
Item 2. HSIZ (H-SIZE)



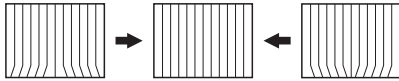
Item 5. PIN (PIN AMP)



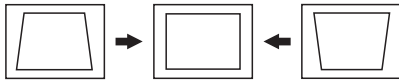
Item 7. UCP (UP COR PIN COR)



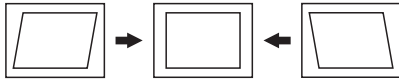
Item 8. LCP (LOW CO PIN COR)



Item 14. PPHA (PIN PHASE)



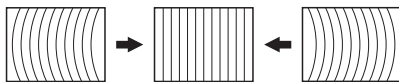
Item 15. VANG (AFC-ANGLE)



Item 16. LANG (L-ANGLE)



Item 17. VBOW (AFC-BOW)



Item 18. LBOW (L-BOW)

**2-9.2. 1080I HD MODE ADJUSTMENT**

1. Input a 1080i cross-hatch signal and an HD monoscope full signal that contains overscan markers. (From service mode, verify 1080i mode).
2. If this procedure was not performed for full mode, adjust the raster position per Section 2-8. H Raster Center Adjustment.
3. Adjust the geometry similar to Full DRC mode. Vertical size is 11.7 ± 0.1 sq. and horizontal size is 15.6 ± 0.1 sq., if monoscope signal is available. Otherwise, set the Vertical size to $91.0 \pm 0.6\%$ scan and Horizontal size as $91.0 \pm 0.6\%$ scan.
4. Adjust HPOS as necessary.

Note: if necessary, touch up the geometry using the data registers listed above for full mode. Check NTSC full mode for adjustment side effects because some data registers are shared between modes, in which case a balance must be achieved.

2-9.3. VERTICAL COMPRESSED MODE CHECK AND CONFIRMATION (FOR 4X3 CRT ONLY)

1. Input a monoscope and crosshatch signal.
2. Set CXA2170-P4 item 26 IDSW to 4 (VC 960i).
3. Check for vertical compressed mode distortion.
4. Adjust VPIN as necessary to correct upper lower horizontal line straightness. Adjust other registers as in Full mode above as necessary, being careful to balance any shared data effect between modes.
5. Repeat 3-4 for IDSW set to 3 (VC 1080i). Write the data before changing modes.
6. Write the data before changing modes.

2-9.4 NORMAL, ZOOM AND WIDE ZOOM MODES

1. Check Normal and Zoom modes for size and position.
 2. Optimize VPIN adjustment in Normal mode for the straightest upper and lower horizontal lines. For other registers, remember to check for shared data side effect.
 3. Write the data before changing modes.
 4. Check Wide Zoom mode for size and position.
Wide Zoom is a specially adjusted mode to fit a 4:3 picture into a 16:9 format, and is only available on wide screen models.
 5. Set the following key registers to the data indicated:
VSCO = 10, UVLN = 4, LVLN = 4, SLIN = 10, MPIN = 9,
then adjust the other data registers shown here for Full mode to straighten horizontal and vertical lines. The picture on the top and bottom edge is deliberately compressed vertically, and similarly the picture on the left and right side is expanded horizontally.
- Note:** Do not adjust horizontal and vertical linearity to make another Full mode. Most data registers for this mode are dedicated to Wide Zoom mode only so there should be no adjustment side effects to other modes but please confirm this.
6. Write the data before changing modes.

SECTION 3: SAFETY RELATED ADJUSTMENTS

3-1. PREPARATION BEFORE CONFIRMATION

Standard 135.3 \pm 1 VAC

Check Condition:

AC input voltage: 120 (\pm 2) VAC

Note: If using a stabilized power supply, make sure that the distortion factor is 3% or less.

Setting Mode: Full mode

Signal Input: Cross-hatch of NTSC

Initial Setting: Standard Reset condition

Confirm Point: Across CN5509 PIN 9 for B+ of DZ Board

3-1.1 HOLD-DOWN OPERATION CONFIRMATION

1. Using an external DC power supply, apply 5.3 \pm 0.5 Vdc between Pin 2 of CN507 (jig connector) and ground (Pin 8); confirm set goes to hold-down (main power relay click).
2. Remove the external DC power supply.

3-2. B+ MAX CONFIRMATION

Standard 135.3 \pm 1 VAC

Check Condition:

AC input voltage: 120 (\pm 2) VAC

Note: If using a stabilized power supply, make sure that the distortion factor is 3% or less.

Setting Mode: Full mode

Signal Input: Cross-hatch of NTSC

Initial Setting: Standard Reset condition

Confirm Point: Across CN5509 PIN 9 for B+ of DZ Board

3-3. B+ VOLTAGE CHECK

Standard: 135.3 \pm 1 VDC

Measurement point:

CN5509 pin (9) for B+ of [DZ] board

Input Video Signal: All Black Signal

Picture level: Picture/Brightness Minimum

3-4. HIGH VOLTAGE (HV) CHECK

Standard: 30.5 \pm 0.5 kV
(KV-27HS420/29DRC420/30HS420 only)

Standard: 31.5 \pm 0.5 kV
(KV-32HS420/34HS420/36HS420 only)

Measurement point: Anode of CRT

Input Video Signal: All Black Signal

Picture level: Picture/Brightness Minimum

HV Probe: Service can use Fluke 80K-40 or equivalent.

3-5. PREPARATION FOR HV AND IK PROTECTOR CHECK

1. Remove DZ board screws and carefully lift board as necessary to gain access to the bottom of the board.
2. Unsolder CN5001 pin 1 to open ABL connection to AY board.
(Alternately, open AY - DZ connector (CN509-CN5001) and carefully push pin 1 metal tab (ABL) up from the bottom and pull up from the top using long nose pliers and release it from the connector, then close the connector with pin 1 connection now open.)
3. Install jumper wire from MY board connection CN2304 pin 1 to CN509 pin 1 to inject 5V to ABL line. (Alternately, use STBY 5V, IC501 Pin O on AY board)
4. Unsolder CN5009 pin 8 (H-prot).
5. Open ABL pin 1 of T8001 (RHT) on DZ board and connect analog current meter.

3-6. HV PROTECTOR CHECK

3-6-1. CUT OFF CONDITION

Input Video Signal: All Black Signal

Picture level: Picture/Brightness Minimum

1. Confirm ABL current which should be approximately 0.160mA.
2. Short across C8002, C8021, and C8052.
3. Turn off the set and install precision VR1 jig (a multi turn pot initially set to 100K) to IC8005 pin 1 (It's the unmarked IC8005 pin on PWB A side, neither K nor A.) and GND (C8076 -).
4. Restore power and adjust HV to obtain 34.4 \pm 0.15kV (KV-27HS420/29DRC420/30HS420 only) or 35.2 \pm 0.15kV (KV-32HS420/34HS420/36HS420 only) by precision VR1 jig.
Note: If the picture turns bright red or other color and the set shuts down, place a 10 M Ω resistor on the CH board between G2 and E2 pins on the socket. Confirm G2 adjustment before returning set to production.
5. Remove short from C8002 and confirm that hold down activates.
6. Short C8002 again and confirm that HV recovers.
7. Re-adjust HV to obtain 31.5 \pm 0.2 kV (KV-27HS420/29DRC420/30HS420 only) or 32.5 \pm 0.2 kV (KV-32HS420/34HS420/36HS420 only) by precision VR1 jig.
8. Remove short from C8002 and C8021 and C8052.
9. Confirm that hold down does not activate.

Note: Remove the 10 M Ω resistor, if installed in step D above

3-6-2. HIGH LIGHT CONDITION

Input Video Signal:.....All White Signal

Picture level:.....Picture/Brightness Adjustment

1. Short across C8002, C8021, C8052, C8012, and C8015.
2. Set ABL current to **2.76mA** by adjusting picture and brightness towards max condition.
3. Adjust HV to obtain **$33.6 \pm 0.15\text{kV}$** (KV-27HS420/29DRC420/30HS420 only) or **$34.5 \pm 0.15\text{kV}$** (KV-32HS420/34HS420/36HS420 only) by precision RV1 jig.
4. Remove short from C8002 and confirm that hold down activates.
5. Short C8002 again and confirm that HV recovers.
6. Re-adjust HV to obtain **$31.2 \pm 0.2\text{ kV}$** (KV-27HS420/29DRC420/30HS420 only) or **$32.2 \pm 0.2\text{ kV}$** (KV-32HS420/34HS420/36HS420 only) by precision VR1 jig.
7. Remove shorts from C8002, C8021, and C8052.
8. Confirm that hold down does **not** activate.
9. Remove short from C8012 and C8015.
10. Remove VR1 jig from DZ board

3-7.IK PROTECTOR CHECK

Input Video Signal:.....All White Signal

Picture level:.....Picture/Brightness Adjustment

1. Short across C8015.
2. Set ABL current to 2.76mA by adjusting picture and brightness towards max condition.
3. Confirm that AC Relay shuts off.
4. Remove short from C8015 and Short across C8012.
5. Turn the set off and on to reset AC relay latch.
6. Confirm the voltage at CN5009 pin 8 (H_prot) = $3.6 \pm 0.5\text{V}$.
7. Remove short from C8012.

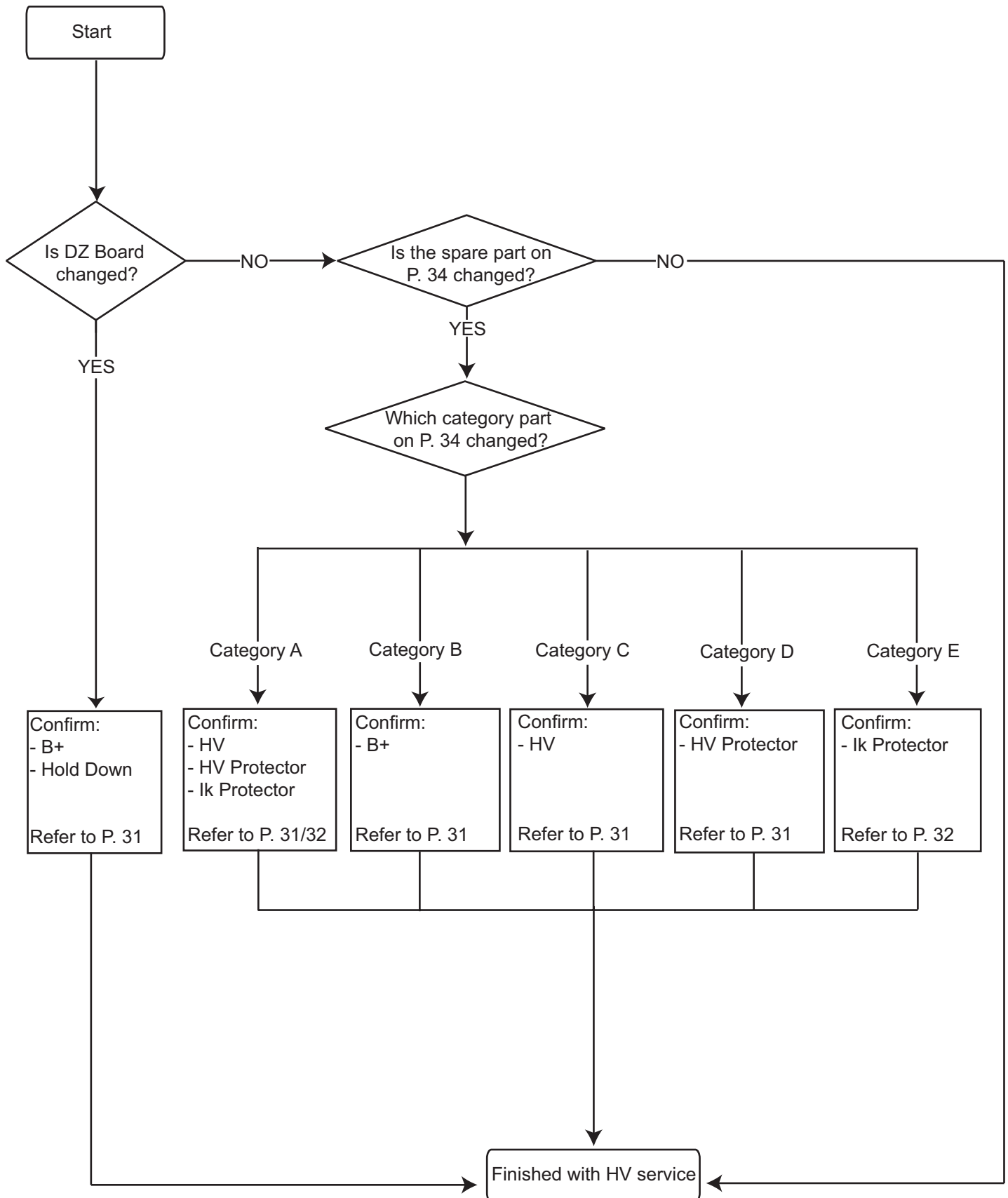
3-8.HOLD DOWN CHECK

1. Using an external DC power supply, apply $5.3 \pm 0.5\text{ Vdc}$ between Pin 2 of CN507 (jig connector) and ground (Pin 8) on AY board.
2. Confirm that hold down activates.
3. Remove the external DC power supply.

3-9.RESTORATION

1. Re-solder CN5001 pin 1 and CN5009 pin 8 to restore AY-DZ connections. (Or as applicable, restore AY-DZ connector by carefully pressing the tab back into the slot and snapping the connector shut. Be sure the tab is flush and level with the other tabs on the connector.)
2. Remove jumper wire from MY board connection CN2304 pin 1 to CN509 pin 1.
3. Remove current meter from ABL pin and restore ABL pin connection.
4. Replace all DZ board screws and restore user menu settings to reset condition.

3-10.HV SERVICE FLOWCHART



HV SERVICE FLOWCHART TABLE

Ref. #	Category
T8001	A
R8015	C
R8017	C
R8019	D
R8035	E
R8036	E
R8037	E
R8038	E
R8039	E
R8040	E
R8043	E
R8078	D
R8165	D
IC8005	C
IC8104	D
R8012	C
R8014	C
R8016	D
R8021	C
R8027	E
R8029	E
R8030	E
R8031	E
R8046	D
R8052	D
R8059	C
R8060	C
R8066	C
R8072	D
R8079	D
R8082	E
R6590	B
D8022	D
PH8003	C
Q8007	E
Q8008	E
IC8001	D
IC8002	C
IC8004	C
IC6503	B

SECTION 4: CIRCUIT ADJUSTMENTS

ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER

Use the Remote Commander (RM-Y197) to perform the circuit adjustments in this section.

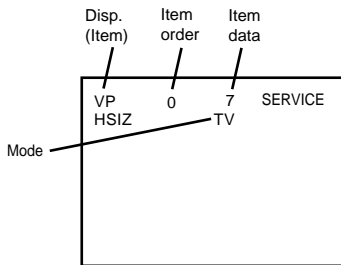
Test Equipment Required: 1. Pattern generator 2. Frequency counter 3. Digital multimeter 4. Audio oscillator

4-1.SETTING SERVICE ADJUSTMENT MODE

- Standby mode (Power off).
- Press the following buttons on the remote commander within a second of each other:

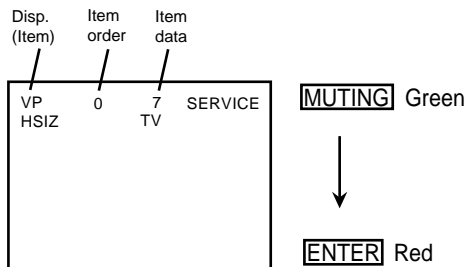
DISPLAY → Channel **5** → Sound Volume **4** → Power

4-1.1. SERVICE ADJUSTMENT MODE IN

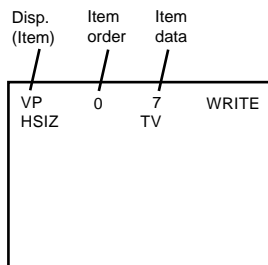


- The CRT displays the item being adjusted.
- Press **1** or **2** on the Remote Commander to select the item.
- Press **3** or **6** on the Remote Commander to change the data.
- Press **MUTING** then **ENTER** to write into memory.

4-1.2.SERVICE ADJUSTMENT MODE MEMORY



- Press **8** on the Remote Commander to initialize.



- DO NOT turn off set until SERVICE appears.

4-1.3. READING THE MEMORY

- Enter into Service Mode.
- Press **0** on the Remote Commander.
- Press **ENTER** to read memory.

4-1.4. ADJUSTING THE PICTURE

- Enter into Service Mode
- Press **2** or **5** on the remote to select the device item.
- Press **1** or **4** on the remote to select an item.
- Press **3** or **6** on the remote to change the data.
- Press **MUTING** then **ENTER** to write into memory.

4-1.5. RESETTING THE DATA

CAUTION: Be careful when using the remote! It will clear and re-initialize ALL NVM data including deflection adjustment data if not reset properly as follows:

4-1.6. RESETTING THE MID NVM DATA

- Enter into Service Mode.
- Press **7**, then **JUMP**, and then press **ENTER** on the remote.

4-1.7. RESETTING THE SYSTEM NVM DATA

- Enter into Service Mode. This resets DEFL adjust and video white balance.
- Press **7**, then **9**, and then press **ENTER** on the remote.

4-1.8. COPY FUNCTION

How to use copy function for DA4 Chassis:

- After writing your adjusted data into NVM, press **MUTING** then **ENTER**, copy can be made by changing copy data from **0** to **1** then **MUTING**, and **ENTER** again.

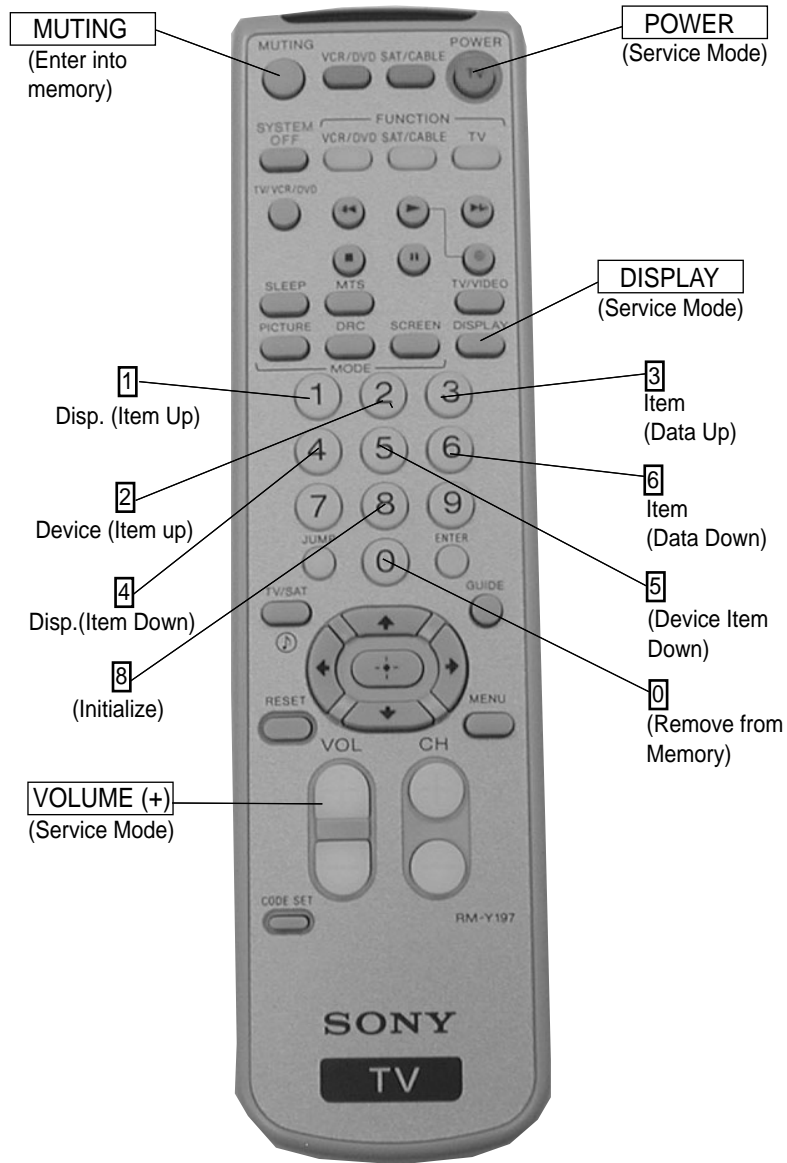
WARNING: DO NOT copy data before writing your corrected data in NVM. If data is copied before writing corrected data, old data will be copied.

- CPY1: DF/DQP DATA (CXA2170D-4 Item 6)

4-2.MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, pull out the plug from the AC outlet, then replace the plug in the AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again to confirm they were adjusted.

4-3.REMOTE ADJUSTMENT BUTTONS AND INDICATORS



RM-Y197

4-4.SERVICE DATA

Category	No	Item	Range	*NOT be memorized												
VERSION	0	VER*	0,1	0 *												
	1	DMY1*	0-255	0												
3D-COMB	0	NRMD*	0-3	0 *							Note: Item * uses the fixed setting in normal TV operations. {Its setting can be changed for testing in Servcie mode only. But the change will not be memorized after leaving Service mode.}					
	1	CLKS	0-3	1												
	2	NSDS*	0-3	0 *												
	3	MSS*	0-3	0 *												
	4	KILS*	0-3	1 *												
	5	FRZE*	0,1	0 *												
	6	EXCS	0-3	1												
	7	CDL	0-7	4												
				NRMD=0				NRMD=1		NRMD=2		NRMD=3				
	8	DYCO	0-15	2				2		2		2				
	9	DYGA	0-15	10				10		10		10				
	10	DCCO	0-15	5				5		5		5				
	11	DCGA	0-15	5				5		5		5				
	12	WSC	0-2	1												
	13	WSS	0,1	0												
				Vivid		Standard		Movie		Pro						
	14	VAPG	0-7	4		2		2		0						
	15	VAPI	0-31	4		4		4		0						
	16	TEST*	0,1	0 *												
				Vivid				Standard		Movie		Pro		Twin		
				RF		CV/YC		RF		CV/YC		RF			CV/YC	
	17	YPFT	0-3	3		3		3		3		3		3		3
	18	YPFG	0-15	9		5		7		5		5		5		6
	19	SEDC	0,1	0												
20	SEDY	0,1	1													
21	YHCO	0-3	1													
22	YHCG	0,1	0													
23	SYSP	0-3	0													
24	TES2*	0-7	0 *													

Category	No	Item	Range	*NOT be memorized				
2103-1				V5/V6 HDMI	Others			
	0	YLEV	0-62	34	20			
	1	CLEV	0-63	40	17			
				RF	CV/YC			
	2	SCON	0-15	9	9			
	3	SCOL	0-15	2	2			
	4	SHUE	0-15	11	5			
	5	YDLY	0-3	0	0			
				RF	CV/YC	V5/V6	HDMI	MemoryStick
	6	SHAP	0-15	6	8	4	8	8
	7	SHF0	0-3	0	0	3	0	0
	8	PRE0	0-3	3	3	3	3	3
	9	BPF0	0-3	3				
	10	BPFQ	0-3	2				
				RF	CV/YC			
	11	BPSW	0,1	1	0			
	12	TRAP	0,1	0				
	13	LPF	0,1	1				
				RF	CV/YC	Others		
	14	AFCG	0,1	1	0	0		
	15	CDMD	0-3	3	3	3		
	16	SSMD	0-3	0	0	0		
				RF	CV/YC	V5/V6	HDMI	MemoryStick
17	HMSK	0,1	0	1	1	0	0	
18	HALI	0,1	0					
			RF	CV/YC	V5/V6	HDMI	MemoryStick	
19	PPHA	0-15	7	7	7	7	7	
			V5/V6	MemoryStick	Others			
20	CBO1	0-63	36	32	34			
21	CRO1	0-63	38	32	32			

Category	No	Item	Range	*NOT be memorized																		
2103-1				V5/V6 HDMI	Others																	
	22	CBO2	0-63	32																		
	23	CRO2	0-63	32																		
	24	ATPD	0-3	0										1	1	2	1	Notes: Settings applied to CXA2103 (M&S), if applied. Settings also based on 2170P-4/BLK data				
	25	DCTR	0-3	0	2	1	3	2														
2170P-1				DRC		HDMI	Memory Stick	Comp / PT														
				CV/YC	480i																	
	0	YOSW	0,1	1	0									1	0	0						
	1	TCOF*	0,1	0 *																		
				DRC	V5/V6				HDMI				Memory Stick	PT								
				RF/CV/YC	480i	480p	720p	1080i	480i	480p/VGA	720p	1080i										
	2	YOF	0-15	0	7	7	7	7	7	0	7	7	7	7								
	3	CBOF	0-63	31	31	46	51	49	31	40	31	31	38	38								
	4	CROF	0-63	31	31	45	51	48	31	40	31	31	34	34								
				ColorTemp																		
				Neutral																		
	5	SBRT	0-63	31																		
	6	RDRV	0-63	45																		
	7	GDRV	0-63	35																		
	8	BDRV	0-63	34																		
	9	RCUT	0-63	41																		
	10	GCUT	0-63	32																		
	11	BCUT	0-63	35																		
				Color Temp		Note: The WBSW setting in Warm can be memorized in NVM.																
				Cool	Warm																	
	12	WBSW	0,1	0	Service Data *																	
	13	SBOF	0-15	7	7																	
	14	RDOF	0-63	31	31																	
	15	GDOF	0-63	31	34																	
	16	BDOF	0-63	34	45																	
	17	RCOF	0-63	31	31																	
	18	GCOF	0-63	31	37																	
19	BCOF	0-63	34	63																		

Category	No	Item	Range	*NOT be memorized														
2170P-1				DRC		HDMI	Memory Stick	Comp / PT										
				CV/YC	480i													
	20	DCOL	0-3	3														
2170P-2				Blanking On	Blanking Off	Power Off												
	0	PICO*	0,1	1 *	1 *	0 *												
	1	RGBS*	0-7	0 *	7 *	0 *												
	2	BLKB	0-3	3														
	3	RGBL	0-3	2														
	4	YLMT	0-3	3														
				Aging On	Aging Off													
	5	AGNG*	0-3	2 *	0 *													
	6	AKBO*	0,1	0 *														
				Other	PT													
	7	CLPP	0-3	3	3													
	8	CLPG	0,1	0	0													
	9	CLPS	0,1	0	0													
	10	PPAD	0-7	3	3													
	11	SYNP	0,1	0	0													
	12	HVBT	0,1	0														
2170P-3				Vivid	RF	CV/YC	V5/V6				HDMI					Memory Stick		Twin
							480i	480p	1080i	720p	480i	480p	VGA	1080i	720p	Slide Show / Still Picture	Menu Index	
	0	SYSM	0-3		1	1	1	3	3	1	1	1	3	3	1	1	2	
	1	VMLV*	0-15		7 *													
	2	VMCR	0-3		1	0	0	0	0	0	0	0	0	0	0	0	3	
	3	VMLM	0-3		3	3	3	3	3	3	3	3	3	3	3	3	3	
	4	VMF0	0-3		1	1	1	0	0	1	1	1	0	0	1	1	0	
	5	VMDL	0-15		5	5	5	13	13	5	5	5	13	13	1	1	10	
	6	SHOF	0-3		2	2	2	1	1	1	2	1	0	1	1	2	2	
	7	SHF0	0,1		1	1	1	1	1	1	1	1	1	1	1	1	1	
	8	PROV	0-3		0	3	2	0	3	3	2	0	0	3	3	3	3	
	9	F1LV	0-3		1	0	1	0	0	1	1	0	1	0	1	0	0	

Category	No	Item	Range	*NOT be memorized														
2170P-3					RF	CV/YC	V5/V6				HDMI					Memory Stick		Twin
							480i	480p	1080i	720p	480i	480p	VGA	1080i	720p	Slide Show / Still Picture	Menu Index	
	10	LTLV	0-3	Vivid	2	3	3	1	3	3	3	3	3	3	3	3	3	
	11	LTMD	0,1		1	1	1	0	1	0	1	0	1	1	0	0	0	1
	12	CTLV	0-3		0	0	0	0	3	3	0	0	0	3	3	0	0	0
	13	UBOF	0-7		0	0	0	1	1	1	0	0	0	0	0	2	2	1
	14	UCOF	0-7		2	2	2	2	2	2	2	2	2	2	2	1	1	2
	15	UHOF	0-3		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	16	MIDE	0-63		7	11	15	19	23	27	31	35	44	39	43	37	37	56
0	SYSM	0-3		1	1	1	1	3	3	1	1	1	3	3	1	1	2	
1	VMLV*	0-15		7 *														
2	VMCR	0-3		1	0	0	0	0	0	0	0	0	0	0	0	0	3	
3	VMLM	0-3		3	3	3	3	3	3	3	3	3	3	3	3	3	3	
4	VMF0	0-3		1	1	1	1	0	0	1	1	1	0	0	1	1	0	
5	VMDL	0-15		5	5	5	5	13	13	5	5	5	13	13	1	1	10	
6	SHOF	0-3		3	3	2	0	1	1	2	0	0	1	1	3	3	2	
7	SHF0	0, 1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	
8	PROV	0-3		0	3	2	0	3	3	2	0	0	3	3	3	3	3	
9	F1LV	0-3		0	0	1	1	0	0	1	1	1	0	0	0	0	0	
10	LTLV	0-3		2	2	2	3	3	3	2	3	3	3	3	2	2	3	
11	LTMD	0,1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	
12	CTLV	0-3		0	0	0	0	3	3	0	0	0	3	3	0	0	0	
13	UBOF	0-7		2	2	2	0	2	2	0	0	0	0	0	4	4	1	
14	UCOF	0-7		1	1	2	2	1	2	2	2	2	1	2	0	0	0	
15	UHOF	0-3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16	MIDE	0-63		5	10	14	18	22	26	30	34	44	38	42	36	36	55	

Category	No	Item	Range	*NOT be memorized														
2170P-3				Movie	RF	CV/YC	V5/V6				HDMI				Memory Stick		Twin	
							480i	480p	1080i	720p	480i	480p	VGA	1080i	720p	Slide Show / Still Picture		Menu Index
	0	SYSM	0-3		1	1	1	1	3	3	1	1	1	3	3	1	1	2
	1	VMLV*	0-15		7 *													
	2	VMCR	0-3		1	0	0	0	0	0	0	0	0	0	0	0	0	3
	3	VMLM	0-3		3	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	VMF0	0-3		1	1	1	1	0	0	1	1	1	0	0	1	1	0
	5	VMDL	0-15		5	5	5	5	13	13	5	5	5	13	13	1	1	10
	6	SHOF	0-3		1	1	1	1	1	1	1	1	0	1	1	1	1	1
	7	SHF0	0,1		1	1	1	1	1	1	1	1	1	1	1	1	1	1
	8	PROV	0-3		0	3	2	1	3	3	2	1	0	3	3	3	3	3
	9	F1LV	0-3		0	0	0	0	0	0	0	0	1	0	0	0	0	0
	10	LTLV	0-3		1	1	1	2	1	1	1	2	3	1	1	1	1	1
	11	LTMD	0,1		1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	CTLV	0-3		0	0	0	0	2	2	0	0	0	2	2	0	0	0
	13	UBOF	0-7		0	0	0	0	0	0	0	0	0	0	0	2	2	0
	14	UCOF	0-7		0	0	0	0	0	0	0	0	2	0	0	0	0	0
	15	UHOF	0-3		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	16	MIDE	0-63		3	9	13	17	21	25	29	33	44	37	41	35	35	54
				Pro	RF	CV/YC	V5/V6				HDMI				Memory Stick		Twin	
							480i	480p	1080i	720p	480i	480p	VGA	1080i	720p	Slide Show/ Still Picture		Menu Index
	0	SYSM	0-3		1	1	2	1	3	3	2	1	1	3	3	2	2	2
	1	VMLV*	0-15		7 *													
	2	VMCR	0-3		1	0	0	0	0	0	0	0	0	0	0	0	0	3
	3	VMLM	0-3		3	3	3	3	3	3	3	3	3	3	3	3	3	3
	4	VMF0	0-3		1	1	0	0	0	0	0	0	1	0	0	0	0	0
	5	VMDL	0-15		5	5	8	5	13	13	8	5	5	13	13	2	2	10
	6	SHOF	0-3		1	2	2	0	2	1	2	0	0	2	1	0	0	1
	7	SHF0	0,1		1	1	1	1	1	1	1	1	1	1	1	1	1	1
	8	PROV	0-3		0	2	3	1	3	3	3	1	0	3	3	3	3	3
	9	F1LV	0-3		0	0	0	0	0	0	0	0	1	0	0	0	0	0
	10	LTLV	0-3		0	0	0	0	0	0	0	0	3	0	0	0	0	0
	11	LTMD	0,1		1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	CTLV	0-3		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13	UBOF	0-7		2	2	2	1	1	1	0	0	0	0	0	2	2	2
	14	UCOF	0-7		0	0	0	0	0	0	0	0	2	0	0	0	0	0
	15	UHOF	0-3		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	16	MIDE	0-63		0	8	12	16	20	24	28	32	44	36	40	33	33	53

Category	No	Item	Range	*NOT be memorized						
2170P-3				Vivid	Standard	Movie	Pro			
	17	VM	0-3	3	3	1	0			
	18	VMH	0-15	15	15	12	12			
	19	VMM	0-15	10	10	8	8			
	20	VML	0-15	6	6	4	4			
				HDMI						
				VGA						
	21	VGAP	0-15	5						
	22	VGAS	0-15	0						
	23	VGAB	0-15	0						
	24	VGAC	0-15	0						
	25	VGAV	0-15	5						
2170P-4				Memory Stick	Other					
	0	YCON	0,1	0	1					
				DRC	VDO (V5&6)	VDO (HDMI)	Memory Stick	PT	Note: PT = Pass Through (By pass MID)	
	1	SPIC	0-15	7	7	7	7	7		
	2	SCOL	0-63	31	31	31	31	31		
	3	SHUE	0-63	31	31	31	31	31		
	4	SPIO	0-15	7						
	5	SCLO	0-15	7						
	6	SHUO	0-15	7						
				Vivid	Standard	Movie	Pro			
	7	UPIC	0-63	63	48	39	31			
	8	UBRT	0-63	31	31	31	31			
	9	UCOL	0-63	35	31	31	31			
	10	UHUE	0-63	31	31	31	31			
	11	USHP	0-63	24	29	31	31			
	12	UTMP	0-3	2	1	0	1			

Category	No	Item	Range	*NOT be memorized															
2170P-4				Memory Stick	Other														
	13	RYR	0-15	8															
	14	RYB	0-15	9															
	15	GYR	0-15	9															
	16	GYB	0-15	6															
					RF	CV/YC	V5/V6				HDMI				Memory Stick		Twin		
							480i	480p	1080i	720p	480i	480p	VGA	1080i	720p	Slide Show/ Still Picture		Menu Index	
	17	GAMM	0-3	Vivid	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3
				Standard	1	1	1	1	1	1	1	1	1	1	1	2	2	2	
				Movie	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				Pro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				GAMM=0	GAMM=1	GAMM=2	GAMM=3	Note: Settings based on GAMM data											
	18	GAMS	0-15	0	8	8	8												
	19	GAMR	0-15	0	4	8	12												
	20	GAMG	0-15	0	4	8	12												
	21	GAMB	0-15	0	4	8	12												
					RF	CV/YC	V5/V6				HDMI				Memory Stick		Twin		
							480i	480p	1080i	720p	480i	480p	VGA	1080i	720p	Slide Show/ Still Picture		Menu Index	
	22	BLK	0-3	Vivid	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
				Standard	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
				Movie	0	0	1	0	1	0	1	0	0	1	0	0	0	0	
				Pro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
				BLK=0	BLK=1	BLK=2	BLK=3	Note: Settings based on BLK data											
	23	DCTR	0-15	0	3	7	12												
	24	APED	0-3	0	0	1	2												
	25	DSBO	0-15	7	7	7	7												
	26	IDSW*	0-7	0*															
				BLK=0	BLK=1	BLK=2	BLK=3	Note: Settings based on											
	27	ABLM	0-3	0	1	0	1												

Category	No	Item	Range	*NOT be memorized						
2170P-4				Single		Others				
				Others	MemoryStick 1080Vcomp VGA					
	28	ABLT	0-15	0	9					
	29	SPOF	0-31	0						
	30	DPSQ	0,1	1	1	1	1	Note: Settings based on BLK data		
	31	LRGB	0-15	3						
2170D-1	0	VPOS	0-63	31						
	1	VSIZ	0-63	30						
				1080Full	Others	Note: Used for PJ only				
	2	VSZO	0-63	0	0					
				WideZoom	Others					
	3	VLIN	0-15	8	8					
	4	VSCO	0-15	10	9					
	5	VCEN	0-63	31						
				1080Vcomp 480Vcomp	Others					
	6	VPIN	0-63	15	15					
	7	MVPN	0-3	0						
	8	NSCO	0-63	31						
	9	HTPZ	0-31	15						
	10	MHTZ	0-3	0						
				WideZoom	Zoom	Others				
	11	ZOOM	0,1	1	1	0				
				WideZoom	Zoom	480Full	1080Full	1080Vcomp	480Vcomp	Note: Data variation for 4x3 // 16x9 models
	12	APSW	0,1	1	1	1	0	0	1	
	13	ASPT	0-63	22	43	47 // 3	43 // 0	47	47 // 3	
14	SCRL	0-63	31	31	31	31	31	31		

Category	No	Item	Range	*NOT be memorized		
2170D-1				WideZoom	Others	
	15	UVLN	0-15	4	0	
	16	LVLN	0-15	4	0	
2170D-2	0	HCNT	0-63	31		
				1080Full 1080Vcomp	Others	
	1	HPOS	0-63	31	31	
				WideZoom	Others	
	2	HSIZ	0-63	49	40	
	3	SLIN	0-15	10	4	
	4	MPIN	0-15	11	10	
				WideZoom	Others	1080i
	5	PIN	0-63	40	31	31
				WideZoom	Zoom	480Full 1080Full 1080Vcomp 480Vcomp
	6	PINO	0-15	7	7	7
				WideZoom	Others	1080i
	7	UCP	0-63	31	35	35
	8	LCP	0-63	31	35	35
				32HS420		Other HS Models
				Others	1080i	Others 1080i
	9	UXCG	0-3	1	1	0 0
	10	LXCG	0-3	1	1	0 0
	11	UXCP	0-3	2	2	
	12	LXCP	0-3	2	2	
	13	XCPP	0,1	0	0	
				WideZoom	Others	
	14	PPHA	0-63	20	20	
	15	VANG	0-63	31		
	16	LANG	0-63	31		
	17	VBOW	0-63	31		
	18	LBOW	0-63	31		

Category	No	Item	Range	*NOT be memorized						
2170D-3	0	HBLK	0,1	1						
				1080Full 1080Vcomp	Others					
	1	LBLK	0-63	50	51					
	2	RBLK	0-63	31	27					
				WideZoom	Zoom	480Full 1080Full	480Vcomp 1080Vcomp			
	3	VBLK	0,1	0	0	1	1			
				WideZoom	Zoom	480Full	1080Full	1080Vcomp	480Vcomp	Note:
	4	TBLK	0-15	12	7	2	4	10	8 // 2	Data variation for 4x3 // 16x9 models
	5	BBLK	0-15	15	7	8	6	14	13 // 8	
				1080Full 1080Vcomp	Others					
	6	AFCM	0-3	2	3					
				1080Vcomp 480Vcomp	Others	Note: Data variation for 4x3 // 16x9 models				
	7	JUMP	0,1	1 // 0	0					
				WideZoom	Zoom	480Vcomp 480Full	1080Full	1080Vcomp		
	8	VDJP	0,1	1	1	0	1	1		
				1080Vcomp 1080Full	Others					
	9	VDST	0,1	0	0					
				WideZoom	Zoom	480Full 480Vcomp	1080Full	1080Vcomp		
	10	AKBT	0-31	15	15	20	16	16		

Category	No	Item	Range	*NOT be memorized									
2170D-4				27HS420 29DRC420		32HS420		36HS420		30HS420		34HS420	
				1080Vcomp 480Vcomp	Others	1080Vcomp	Others	1080Vcomp	Others	1080Vcomp	Others	1080Vcomp	Others
						480Vcomp		480Vcomp		480Vcomp		480Vcomp	
	0	QPAM	0-63	36	36	25	25	22	22	33	33	45	45
	1	QPAV	0-63	44	44	40	40	40	40	46	46	47	47
	2	QPAP	0-15	6	6	6	6	6	6	6	6	6	6
	3	QPDC	0-63	22	22	17	17	17	17	29	29	42	42
	4	QPDV	0-63	52	52	52	52	52	52	59	59	63	63
	5	QPDV	0-15	6	6	6	6	6	6	6	6	6	6
	6	CPY1*	0,1	0 *	Note: Copy1 makes the data copying from one mode to all other modes.								
				27HS420 29DRC420	32HS420	36HS420	30HS420	34HS420					
	7	DF	0-63	36	36	36	40	36					
8	DQP	0-63	37	37	37	38	37						
2170D-5	0	VFRQ	0-3	1									
	1	VON*	0,1	1*									
	2	EWDC	0,1	0									
	3	MS15	0,1	0									
	4	HFRQ	0-255	80									
	5	HFRX	0-63	25									
	6	VMPS	0,1	0									
	7	INTR	0,1	0									
	8	VLNL	0-3	0									
	9	VLNH	0-255	0									
	10	AGCS	0,1	0									

Category	No	Item	Range	*NOT be memorized			
D-CONV (CXA8070)	0	YBWU	0-63	31			
	1	YBWL	0-63	31			
	2	RSAP	0-63	31			
	3	RUMB	0-63	31			
	4	RUBW	0-63	31			
	5	RLMB	0-63	31			
	6	RLBW	0-63	31			
	7	LSAP	0-63	31			
	8	LUMB	0-63	31			
	9	LUBW	0-63	31			
	10	LLMB	0-63	31			
	11	LLBW	0-63	31			
	12	CADJ	0-63	29			
	13	HVCA	0-63	55			
CXA2171				V5/V6		HDMI / Tiny Micro \$6D_00	
				720p 1080i	Others	Bit6: 709 = 1	Bit6: 709 = 0
	0	MTRX*	0-3	1 *	0 *	1 *	0 *
				PT	Others	Note: PT = Pass Through	
	1	GAIN	0-3	7	7		
				V5	V6	HDMI	Others
				480i&480p 720p/1080i No Sync	480i/480p 720p/1080i No Sync	480i/480p 720p/1080i No Sync	
	2	FIXS*	0-3	0	0	0	0
				PT	Others		
	3	CBGN	0-15	7	7		
	4	CRGN	0-15	8	8		
	5	YGN	0-15	8	8		
	6	VTC	0-3	0			
				Tristate=1	Tristate=0		
	7	HTC*	0,1	0 *	1 *		
	8	HWID	0-3	1			
9	HSEP	0,1	1				

Category	No	Item	Range	*NOT be memorized						
CXA2171				V5/V6		HDMI / Tiny Micro \$6D_00				
				V5/V6 HDMI 1080i	Others					
	10	HMSK*	0,1	0 *						1 *
				V5	V6	HDMI	Others			
				480i/480p 720p/1080i No Sync	480i/480p 720p/1080i No Sync					
	11	FRGB*	0,1	0	0	0	0			
	MID1	0	DHPH	0-255	109					
1		DVPH	0-63	20						
2		DHAR	0-255	240						
3		DVAR	0-255	135						
4		DHPW	0-63	55						
5		DVPW	0-7	5						
				Single		Twin	Freeze	Favorites	Index	
				480i	Others					
6		DYCD	0-63	3	0	2	2	2	2	
				Table-0	Table-1	Table-2	Table-3			
7		DYSD	0-7	7	4	2	1			
				Single				Favorites VGA	Index VGA	
				VGA		Others				
				Normal	Others	Normal	Others			
8		MDHP	0-255	174	72	156	0	40	41	
				Single			Favorites VGA	Index VGA		
				480i/480p	VGA	Others				
9		MDVP	0-255	30	66	0	34	86		
				Single				Favorites VGA	Index VGA	
				VGA		Others				
				Normal	Others	Normal	Others			
10		MDHS	0-255	162	204	162	240	155	119	

Category	No	Item	Range	*NOT be memorized				
MID1				Single			Favorites	Index
				480i/480p	VGA	Others	VGA	VGA
	11	MDVS	0-255	120	102	135	103	77
				Twin Freeze	Favorites	Index		
	12	MLHP	0-255	36	31	31		
	13	MLVP	0-255	8	30	30		
				Favorites				
	14	SDHP	0-255	167				
	15	SDVP	0-255	5				
	16	SDHS	0-255	115				
	17	SDVS	0-255	79				
	18	PDHP	0-255	0				
	19	PDVP	0-255	0				
	20	PDHS	0-255	0				
	21	PDVS	0-255	0				
				1080iSingle	Others			
	22	DPSW	0,1	0	0			
	23	MDLO	0-63	12				
				Single			Others	
				Normal	Others	MemoryStick		
	24	BCOL	0-15	1	1	0	1	
	25	DYSS	0-3	1				
				Index				
	26	OSDH	0-63	32				
	27	OSDV	0-63	16				

Category	No	Item	Range	*NOT be memorized						
MID2				Single	V5/V6-480i		YC		HDMI-480i	
					Normal	Others	Normal	Others	Normal	Others
	0	DRHP	0-255		153	120	154	117	153	120
	1	DRHS	0-255		162	180	162	180	162	180
	2	DRVVP	0-63		37	37	37	37	37	37
	3	DRVS	0-255		120	120	120	120	120	120
				Twin-Left	480i	YC				
					146	148				
	0	DRHP	0-255		164	164				
	1	DRHS	0-255		57	57				
	2	DRVVP	0-63		110	110				
	3	DRVS	0-255							
				Twin-Right	YC					
					153					
	0	DRHP	0-255		164					
	1	DRHS	0-255		57					
	2	DRVVP	0-63		110					
	3	DRVS	0-255							
				Freeze	480i	YC				
					153	153				
	0	DRHP	0-255		162	162				
	1	DRHS	0-255		57	57				
	2	DRVVP	0-63		110	110				
	3	DRVS	0-255							
				Favorites (Main)	480i		YC			
					Full	Vcomp	Full	Vcomp		
	0	DRHP	0-255		140	140	140	140		
	1	DRHS	0-255		165	165	165	165		
	2	DRVVP	0-63		37	57	37	57		
	3	DRVS	0-255		120	110	120	110		
				Favorites (Sub)	YC					
					153					
	0	DRHP	0-255		171					
	1	DRHS	0-255		28					
	2	DRVVP	0-63		118					
	3	DRVS	0-255							

Category	No	Item	Range	*NOT be memorized														
MID2				Index (Main)	480i		YC											
					Full	Vcomp	Full	Vcomp										
	0	DRHP	0-255		140	140	140	140										
	1	DRHS	0-255		165	165	165	155										
	2	DRVVP	0-63		37	57	37	57										
	3	DRVS	0-255		120	110	120	110										
				Index (Sub)	YC													
					158													
	0	DRHP	0-255		162													
	1	DRHS	0-255		57													
	2	DRVVP	0-63		110													
	3	DRVS	0-255															
MID3				Single	V5/V6						HDMI							
					1080i	720p	480p		480i		1080i	720p	480p		480i		VGA	
							Normal	Others	Normal	Others			Normal	Others	Normal	Others	Normal	Others
	0	VDHP	0-255		107	137	200	152	76	56	107	137	200	152	76	56	170	170
	1	VDHS	0-255		240	161	216	240	162	180	240	161	216	240	162	180	229	229
	2	VDVE	0-63		19	24	37	37	17	17	19	24	37	37	17	17	34	34
	3	VDVS	0-255	135	180	120	120	60	60	135	180	120	120	60	60	120	120	
				Twin-Left	1080i	720p	480p	480i	VGA									
					141	163	192	71	213									
	0	VDHP	0-255		221	147	219	164	209									
	1	VDHS	0-255		43	54	57	27	45									
	2	VDVE	0-63		123	165	110	55	110									
	3	VDVS	0-255															
				Twin-Right	YC													
					73													
	0	VDHP	0-255		164													
	1	VDHS	0-255		27													
	2	VDVE	0-63		55													
	3	VDVS	0-255															
				Freeze	1080i	720p	480p	480i	VGA									
					151	169	200	74	212									
	0	VDHP	0-255		218	145	216	162	208									
	1	VDHS	0-255		43	54	57	27	45									
2	VDVE	0-63	123		165	110	55	110										
3	VDVS	0-255																

Category	No	Item	Range	*NOT be memorized									
MID3				Favorites (Main)	1080i		720p	480p		480i		VGA	
					Full	Vcomp			Full	Vcomp	Full	Vcomp	Full
	0	VDHP	0-255		136	136	158	184	184	68	68	169	169
	1	VDHS	0-255		222	222	148	220	220	165	165	229	229
	2	VDVE	0-63		43	43	55	37	57	17	27	34	34
	3	VDVS	0-255		123	123	165	120	110	60	55	120	120
				Favorites (Sub)	YC								
	0	VDHP	0-255		75								
	1	VDHS	0-255		171								
	2	VDVE	0-63		13								
	3	VDVS	0-255		59								
				Index (Main)	1080i		720p	480p		480i		VGA	
					Full	Vcomp			Full	Vcomp	Full	Vcomp	Full
	0	VDHP	0-255		136	136	158	184	184	68	68	169	169
	1	VDHS	0-255		222	222	148	220	220	165	165	229	229
	2	VDVE	0-63		43	43	55	37	57	17	27	34	34
	3	VDVS	0-255		123	123	165	120	110	60	55	120	120
				Index (Sub)	YC								
	0	VDHP	0-255		76								
	1	VDHS	0-255		162								
	2	VDVE	0-63		27								
	3	VDVS	0-255		55								
				V5/V6					HDMI				
				YC	480i	1080i	720p	480p	480i	1080i	720p	480p	VGA
	4	VDVO	0-3	0	0	0	0	0	0	0	0	0	0
	5	VCPO	0-255	42	42	72	88	122	42	72	88	122	122
	6	VCWD	0-7	1	1	3	3	3	1	3	3	3	3
	7	VYCD	0-63	0	0	0	0	0	0	0	0	0	0
	8	VSTP	0-255	62	62	136	183	126	62	136	183	126	129
	9	VSTT	0-15	0	0	0	0	0	0	0	0	0	0
	10	VHSC	0-255	130	130	130	130	130	130	130	130	130	130
	11	VFRV	0,1	0	0	0	0	0	0	0	0	0	0

Category	No	Item	Range	*NOT be memorized															
MID5	0	POP	0-63	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	1	MHLY	0-3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	MHLC	0-3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	3	MVLY	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	MVLC	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	MHYR	0-3	0	1	1	1	2	3	3	2	0	0	2	1	0	0	1	1
	6	MHYL	0-3	0	1	1	1	1	2	2	2	0	1	2	1	0	0	1	2
	7	MHYE	0-7	0	2	2	5	6	7	7	7	0	2	4	7	0	0	7	7
	8	MHYO	0,1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0
	9	MHCR	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	MHCL	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11	MHCE	0-7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12	MHCO	0-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13	MVYR	0-3	0	0	0	0	1	2	2	2	0	1	1	1	0	0	1	2
	14	MVYL	0-3	0	0	0	0	1	1	1	1	0	1	1	1	0	0	1	2
	15	MVYE	0-7	0	0	0	0	1	1	1	1	0	3	3	3	0	0	4	3
	16	MVCR	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	17	MVCL	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	18	MVCE	0-7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	POP	0-63	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
	1	MHLY	0-3	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1
	2	MHLC	0-3	3	3	3	3	0	0	0	0	0	0	0	0	3	3	3	3
	3	MVLY	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	MVLC	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	MHYR	0-3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1
	6	MHYL	0-3	1	1	1	1	0	1	1	1	1	1	1	1	0	0	1	2
	7	MHYE	0-7	2	2	2	7	0	4	7	7	2	4	7	7	0	0	7	7
	8	MHYO	0,1	1	1	1	1	0	0	0	1	0	0	0	0	1	1	0	0
	9	MHCR	0-3	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0
	10	MHCL	0-3	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0
	11	MHCE	0-7	0	0	0	0	0	0	4	4	0	0	4	4	0	0	0	0
	12	MHCO	0-1	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0
	13	MVYR	0-3	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	2
	14	MVYL	0-3	0	1	1	1	0	0	1	1	0	0	1	1	0	0	1	2
	15	MVYE	0-7	0	1	1	4	0	0	4	4	0	0	4	4	0	0	4	3
	16	MVCR	0-3	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0
	17	MVCL	0-3	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0
	18	MVCE	0-7	0	0	0	0	0	0	4	4	0	0	4	4	0	0	0	0

Category	No	Item	Range	*NOT be memorized															
MID5	0	POP	0-63	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
	1	MHLY	0-3	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0
	2	MHLC	0-3	3	3	3	3	0	0	0	0	0	0	0	0	3	0	0	0
	3	MVLY	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	MVLC	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	MHYR	0-3	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0
	6	MHYL	0-3	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	0
	7	MHYE	0-7	2	2	2	7	0	4	7	7	2	4	7	7	2	0	0	0
	8	MHYO	0,1	1	1	1	1	0	0	0	1	0	0	0	0	1	0	0	0
	9	MHCR	0-3	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0
	10	MHCL	0-3	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0
	11	MHCE	0-7	0	0	0	0	0	0	4	4	0	0	4	4	0	0	0	0
	12	MHCO	0-1	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0
	13	MVYR	0-3	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0
	14	MVYL	0-3	0	1	1	1	0	0	1	1	0	0	1	1	1	0	0	0
	15	MVYE	0-7	0	1	1	4	0	0	4	4	0	0	4	4	1	0	0	0
	16	MVCR	0-3	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0
	17	MVCL	0-3	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0
	18	MVCE	0-7	0	0	0	0	0	0	4	4	0	0	4	4	0	0	0	0
	0	POP	0-63	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
	1	MHLY	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	MHLC	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	MVLY	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	MVLC	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	MHYR	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	MHYL	0-3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	7	MHYE	0-7	0	0	4	2	5	0	0	0	0	0	0	0	0	0	0	0
	8	MHYO	0,1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	MHCR	0-3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	10	MHCL	0-3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	11	MHCE	0-7	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0
	12	MHCO	0-1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	13	MVYR	0-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	14	MVYL	0-3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	15	MVYE	0-7	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0
	16	MVCR	0-3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	17	MVCL	0-3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	18	MVCE	0-7	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0

Category	No	Item	Range	*NOT be memorized	
MID5				Memory	
	19	SHLY	0-7	0	
	20	SHLC	0-7	0	
	21	SVLY	0-7	0	
	22	SVLC	0-7	0	
	23	SHYR	0-3	0	
	24	SHYL	0-3	0	
	25	SHYE	0-7	0	
	26	SHYO	0,1	0	
	27	SHCR	0-3	0	
	28	SHCL	0-3	0	
	29	SHCE	0-7	0	
	30	SHCO	0,1	0	
	31	SVYR	0-3	0	
	32	SVYL	0-3	0	
	33	SVYE	0-7	0	
	34	SVCR	0-3	0	
	35	SVCL	0-3	0	
	36	SVCE	0-7	0	
CXA3506R				480i	Others
	0	MCON	0,1	64	64
	1	SCOR	0-255	128	128
	2	SCOG	0-255	128	128
	3	SCOB	0-255	128	128
	4	RGB	0-255	0	0

Category	No	Item	Range	*NOT be memorized																
AUDIO				27HS420 29DRC420	32HS420	36HS420	30HS420	34HS420												
	0	ASYS	0,1	0	0	0	0	0												
	1	TRCV	0-3	1	1	1	1	1												
	2	BACV	0-3	0	0	0	0	0												
	3	MDCV	0-3	0	0	2	0	0												
	4	SVHI	0-7	1	0	0	0	0												
	5	SVLO	0-7	0	0	0	0	0												
	6	MIDL	0-15	5	6	7	6	5												
	7	LOFQ	0-7	0	0	0	0	0												
	8	SBAS	0-15	10	10	10	10	11												
	9	WOWS	0-15	2	2	2	2	2												
	10	STRE	0-15	6	6	5	6	7												
	11	WOWC	0-15	4	4	4	4	4												
	12	PSEF	0-15	5	5	5	5	5												
	13	AGCL	0-15	9	9	9	9	9												
				27HS420 & 29DRC420					32HS420					36HS420						
				TruSurround	Simulated	SteadySound	WOW	Off	TruSurround	Simulated	SteadySound	WOW	Off	TruSurround	Simulated	SteadySound	WOW	Off		
	14	BBE	0,1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	15	BBEP	0-7	4	4	5	5	4	4	4	5	5	4	5	5	6	6	5		
	16	BBEL	0-7	4	4	4	6	4	4	4	4	6	4	4	4	4	6	4		
	17	BB2P	0-7	4	4	5	5	4	4	4	5	5	4	5	5	6	6	5		
	18	BB2L	0-7	4	4	4	6	4	4	4	4	6	4	4	4	4	6	4		
				30HS420					34HS420											
				TruSurround	Simulated	SteadySound	WOW	Off	TruSurround	Simulated	SteadySound	WOW	Off							
	14	BBE	0,1	1	1	1	1	1	1	1	1	1	1							
	15	BBEP	0-7	3	3	4	4	3	5	5	6	6	5							
	16	BBEL	0-7	5	5	5	7	5	4	4	4	6	4							
	17	BB2P	0-7	3	3	4	4	3	5	5	6	6	5							
	18	BB2L	0-7	5	5	5	7	5	4	4	4	6	4							
				27HS420 29DRC420	32HS420	36HS420	30HS420	34HS420												
19	TRS1	0-7	4	4	4	4	4													
20	TRS2	0-7	2	2	2	2	2													

Category	No	Item	Range	*NOT be memorized						
SNNR	0	MODE	0-3	0						
	1	SNNR	0-7	0						
				WSLT- A	WSLT- B	WSLT- C	WSLT- D	WSLT- E	WSLT- F	WSLT- G
	2	WSLT	0-255	15	31	45	63	85	110	127
				SNNR=0	SNNR=1	SNNR=2	SNNR=3	SNNR=4	SNNR=5	SNNR=6
	3	CPFG	0-15	0	0	1	1	2	2	2
	4	CPFT	0-3	0	0	0	0	0	0	0
	5	CCOR	0-3	0	0	1	1	1	1	1
	6	CHCG	0,1	0	1	1	1	1	1	1
	7	CAPG	0-7	0	0	0	0	0	0	0
	8	3SHP	0-15	0	0	1	1	2	2	3
	9	NYNR	0-15	0	1	2	2	3	3	4
	10	NCNR	0-15	0	1	2	2	3	3	4
	11	NYMG	0-3	0	0	0	0	0	0	0
	12	NCMG	0-3	0	0	0	0	0	0	0
	13	NYLT	0-15	0	1	1	2	3	4	6
	14	NYNC	0-15	0	0	2	2	3	3	4
	15	NYCO	0,1	0	0	1	1	1	1	1
	16	7SHP	0-63	0	0	1	1	3	3	3
	17	7YF1	0-3	0	0	1	1	2	2	2
	18	7LTI	0-3	0	0	0	0	0	0	0
	19	7CTI	0-3	0	0	0	0	0	0	0
	20	7VML	0-15	0	0	0	0	0	0	0
	21	7VMC	0-3	0	0	1	1	2	2	2
	22	MIDD	0-63	0	0	1	1	2	2	2

Category	No	Item	Range	*NOT be memorized	
3DNR	0	WHCT	0-63	44	
	1	NIQM	0,1	1	
	2	CLPW	0-63	30	
	3	CLPP	0-255	80	
	4	YHBW	0-255	138	
	5	YBKL	0-15	0	
	6	YBKO	0,1	0	
	7	MUTE	0,1	0	
	8	YHBS	0-127	40	
	9	CHBW	0-255	138	
	10	CBKO	0-127	40	
	11	CHBO	0,1	0	
	12	VHBL	0-15	0	
	13	UHBL	0-15	0	
	14	UVDL	0-7	0	
	15	YDL	0-7	0	
	16	PVDI	0,1	0	
	17	PHDI	0,1	0	
	18	HDW	0-63	16	
	19	PVDO	0,1	0	
	20	PHDO	0,1	0	
	21	HST	0-255	54	
	22	VDL	0-15	0	
	23	VDW	0-15	44	
	24	NDET	0-15	1	
	25	NVP	0-15	30	
	26	NDTS	0-3	80	
	27	HROF	0,1	138	
	28	NDGW	0-15	0	
	29	UOFS	0-7	1	
	30	POT	0-3	0	
	31	UVF	0,1	40	
	32	APC	0,1	138	
	33	DAP	0,1	40	

Category	No	Item	Range	*NOT be memorized							
3DNR				Vivid		Standard		Movie		Pro	
				480i	Others	480i	Others	480i	Others	480i	Others
	34	YLV	0-15	15	15	10	10	10	10	8	8
	35	YST	0,1	0							
	36	YNT	0,1	1							
	37	YPL	0,1	1							
	38	YMV	0,1	0							
				Vivid		Standard		Movie		Pro	
				480i	Others	480i	Others	480i	Others	480i	Others
	39	YCR	0-31	3	3	3	3	3	3	3	3
	40	VOS	0-7	1							
				Vivid		Standard		Movie		Pro	
				480i	Others	480i	Others	480i	Others	480i	Others
	41	YMG	0-3	3	3	3	3	3	3	3	3
	42	YEG	0,1	1							
				Vivid		Standard		Movie		Pro	
				480i	Others	480i	Others	480i	Others	480i	Others
	43	YEL	0-15	6	6	6	6	6	6	6	6
	44	YLM	0-127	6	6	6	6	6	6	6	6
	45	CLV	0-15	15	15	10	10	10	10	8	8
	46	CNT	0,1	1							
	47	CPL	0,1	1							

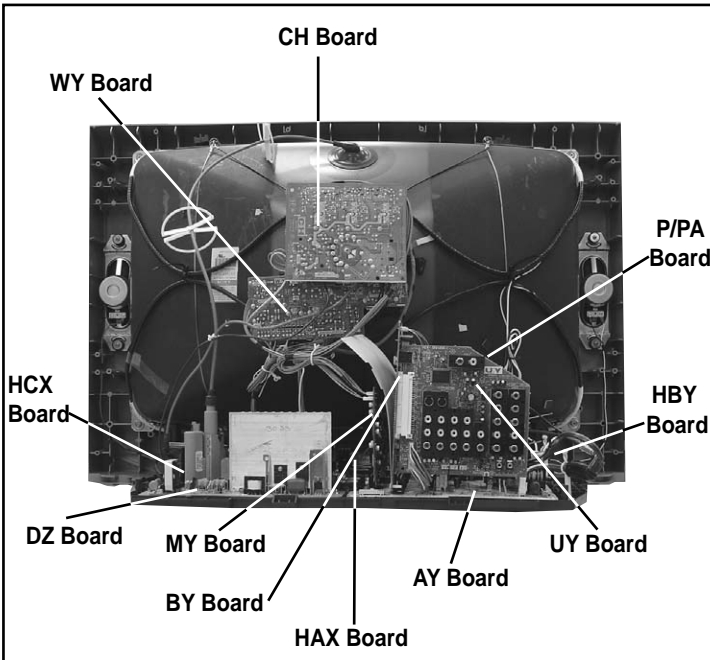
Category	No	Item	Range	*NOT be memorized							
3DNR				Vivid		Standard		Movie		Pro	
				480i	Others	480i	Others	480i	Others	480i	Others
	48	CMG	0-3	3	3	3	3	3	3	3	3
	49	CCR	0-31	6	6	6	6	6	6	6	6
	50	CLM	0-127	6	6	6	6	6	6	6	6
	51	NVSL	0-255	20							
	52	NVSH	0,1	0							
	53	NHS	0-127	16							
	54	NVEL	0-255	244							
	55	NVEH	0,1	0							
	56	NHE	0-127	120							
				Vivid		Standard		Movie		Pro	
				480i	Others	480i	Others	480i	Others	480i	Others
	57	YNG	0-3	3	3	3	3	3	3	3	3
	58	COR	0,1	0	0	0	0	0	0	0	0
	59	LPF	0,1	0	0	0	0	0	0	0	0
	60	YLT	0-15	0	0	0	0	0	0	0	0
	61	YNC	0-15	15	15	10	10	10	10	8	8
	62	YCO	0,1	0	0	0	0	0	0	0	0
	63	ADTH	0,1	0							
HDMI	0	WP	0,1	0 *							
	1	INP	0~3	1							
	2	INFO	0,1	0 *							
OP	0	DLY1	0-31	4							
	1	DLY2	0-31	12							
	2	DLY3	0-15	7							
	3	OSDH	0-255	20							
	4	HDPT	0,1	1	Note: CXA2170 Setting						
	5	MSBG	0-255	0							
	6	AACK*	0-3	2							
	7	RAMW*	0-3	0 *							

4-5.ID MAP TABLE


Category	No	Item	Range	*NOT be memorized													
ID				DA4-2004HS (4x3) Models									DA4-2004HS (16x9) Models				
				KV-27HS420		KV-29DRC420		KV-32HS420		KV-36HS420			KV-30HS420			KV-34HS420	
				US	CND	North	South	US	CND	US	CND	HAW	US	CND	HAW	US	CND
	0	ID0	0-255	89	89	89	89	89	89	89	89	89	89	89	89	89	89
	1	ID1	0-255	217	217	217	217	217	217	217	217	217	217	217	217	217	217
	2	ID2	0-255	239	239	239	239	239	239	239	239	239	239	239	239	239	239
	3	ID3	0-255	106	90	202	202	106	90	106	90	106	106	90	106	106	90
	4	ID4	0-255	195	195	195	195	195	195	195	195	195	195	195	195	195	195
	5	ID5	0-255	240	240	240	240	240	240	240	240	240	240	240	240	240	240
	6	ID6	0-255	176	176	176	176	176	176	176	176	176	176	176	176	176	176
	7	ID7	0-255	16	16	80	80	16	16	16	16	16	17	17	17	17	17

SECTION 5: DIAGRAMS


5-1.CIRCUIT BOARDS LOCATION



The components identified by shading and \triangle symbol are critical for safety. Replace only with part number specified.

The symbol  indicates a fast operating fuse and is displayed on the component side of the board. Replace only with fuse of the same rating as marked.

Les composants identifiés par un trame et une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Le symbole  indique une fusible à action rapide. Doit être remplacé par une fusible de même valeur, comme marqué.

The components identified by \blacksquare in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be necessary, replace only with the value originally used.

When replacing components identified by \blacksquare , make the necessary adjustments as indicated. If the results do not meet the specified value, change the component identified by \blacksquare and repeat the adjustment until the specified value is achieved.

When replacing the parts listed in the table below, it is important to perform the related adjustments.

Part Replaced (\blacksquare)	Adjustment (\blacksquare)
DZ BOARD: IC6503, IC8001, IC8002, IC8004, IC8005, IC8104, D8022, PH8003, Q8007, Q8008, R6590, R8012, R8014, R8015, R8016, R8017, R8019, R8021, R8027, R8029, R8030, R8031, R8035, R8036, R8037, R8038, R8039, R8040, R8043, R8046, R8052, R8059, R8060, R8066, R8072, R8078, R8079, R8082, R8165, T8001	HV ADJUST No HV Adjustment Required

REFERENCE INFORMATION

RESISTOR

: RN METAL FILM
 : RC SOLID
 : FPRD NONFLAMMABLE CARBON
 : FUSE NONFLAMMABLE FUSIBLE
 : RW NONFLAMMABLE WIREWOUND
 : RS NONFLAMMABLE METAL OXIDE
 : RB NONFLAMMABLE CEMENT
 : \otimes ADJUSTMENT RESISTOR

CAPACITOR

: TA TANTALUM
 : PS STYROL
 : PP POLYPROPYLENE
 : PT MYLAR
 : MPS METALIZED POLYESTER
 : MPP METALIZED POLYPROPYLENE
 : ALB BIPOLAR
 : ALT HIGH TEMPERATURE
 : ALR HIGH RIPPLE

COIL

: LF-8L MICRO INDUCTOR

5-2.PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS INFORMATION

All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.


All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. $\text{k}\Omega=1000\Omega$, $\text{M}\Omega=1000\text{k}\Omega$


Indication of resistance, which does not have one for rating electrical power, is as follows: Pitch : 5mm
Rating electrical power : $\frac{1}{4}\text{W}$

$\frac{1}{4}\text{W}$ in resistance, $\frac{1}{10}\text{W}$ and $\frac{1}{16}\text{W}$ in chip resistance.

 : nonflammable resistor

 : fusible resistor

\triangle : internal component

 : panel designation and adjustment for repair

\perp : earth ground

$\text{---}\text{---}\text{---}$: earth-chassis

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Readings are taken with a color-bar signal input.

Readings are taken with a $10\text{M}\Omega$ digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibility.

 : B+line.

 : B-line. (Actual measured value may be different).

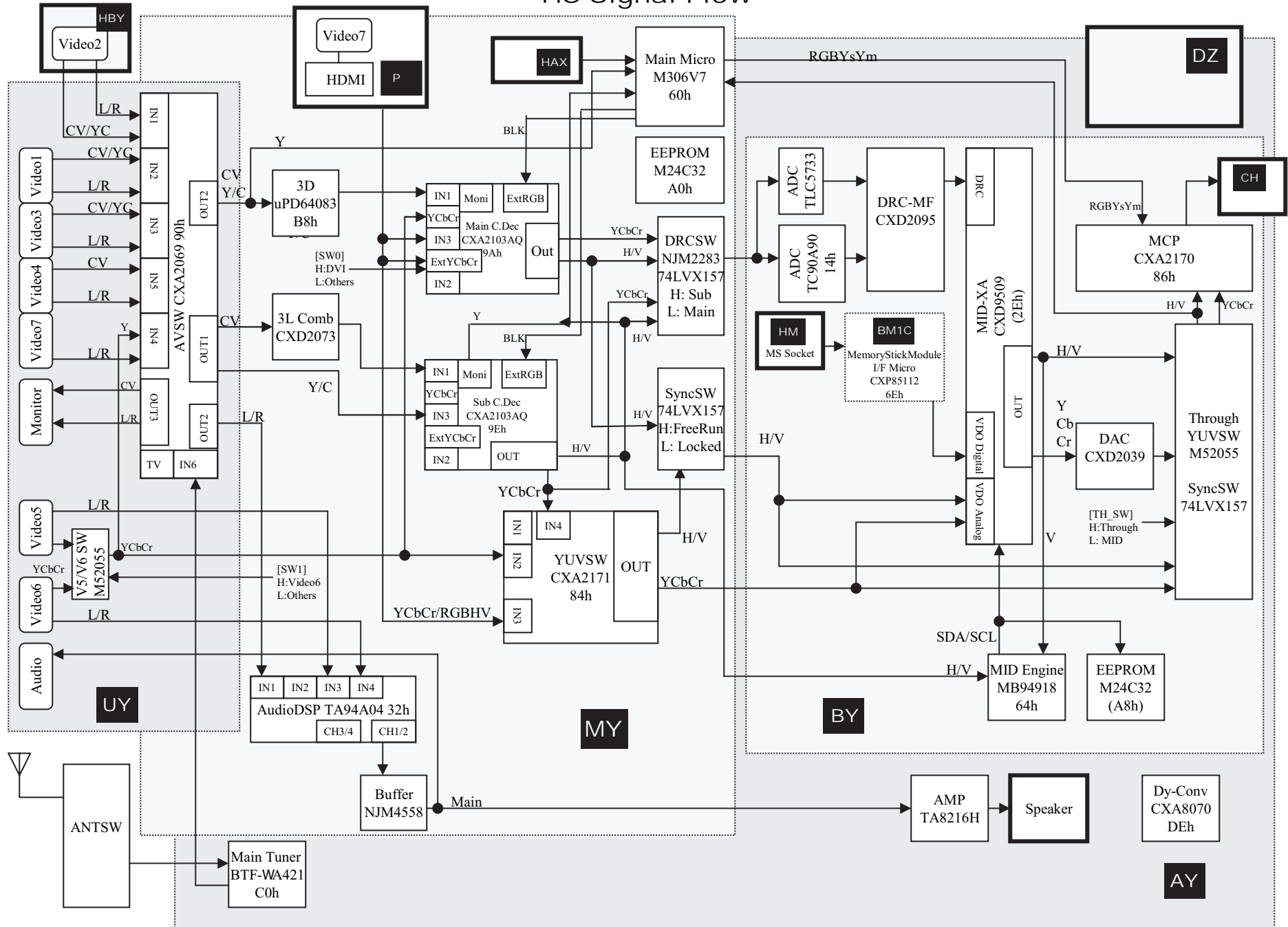
 : signal path. (RF)

Circled numbers are waveform references.

5-3. BLOCK DIAGRAMS

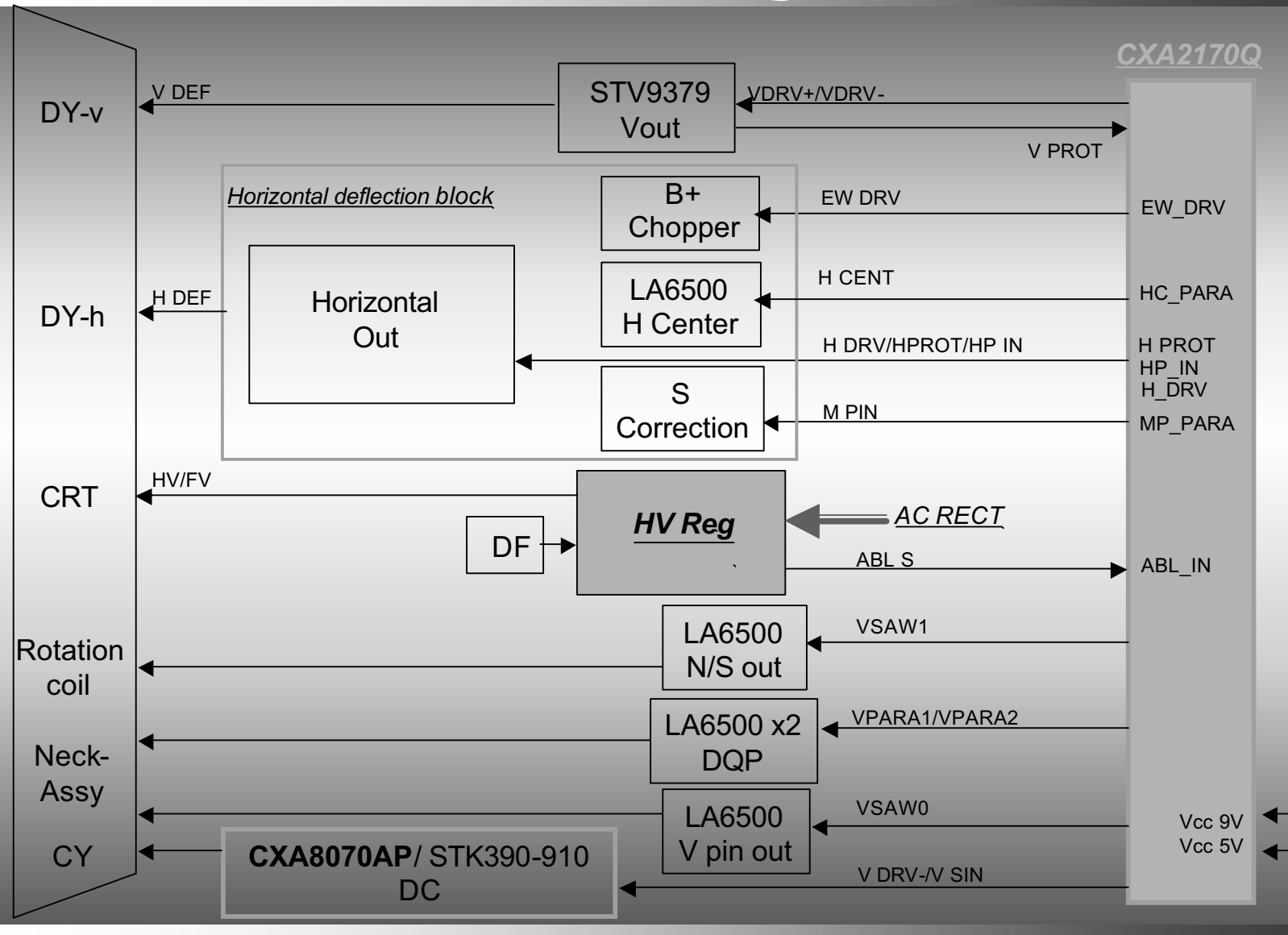
BLOCK DIAGRAMS (1 OF 3)

HS Signal Flow



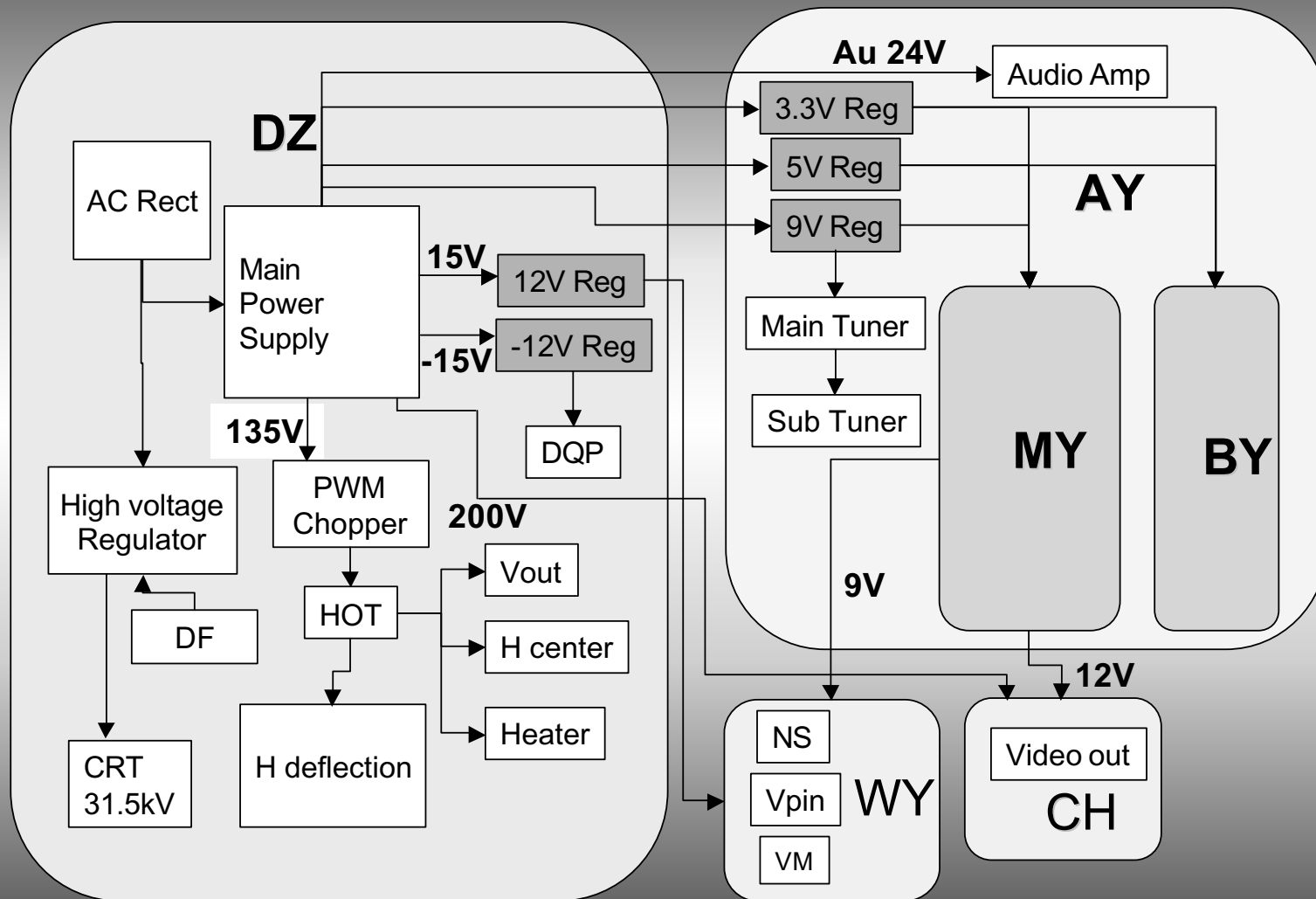
BLOCK DIAGRAMS (2 OF 3)

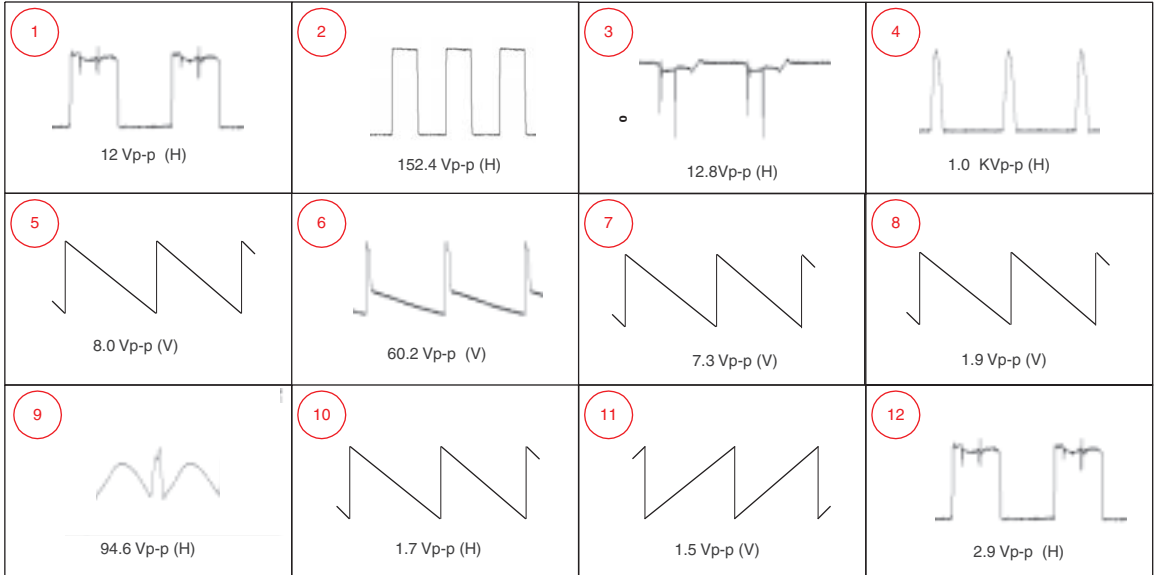
Deflection & HV System Block



BLOCK DIAGRAMS (3 OF 3)

Power Supply Load Map

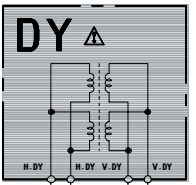




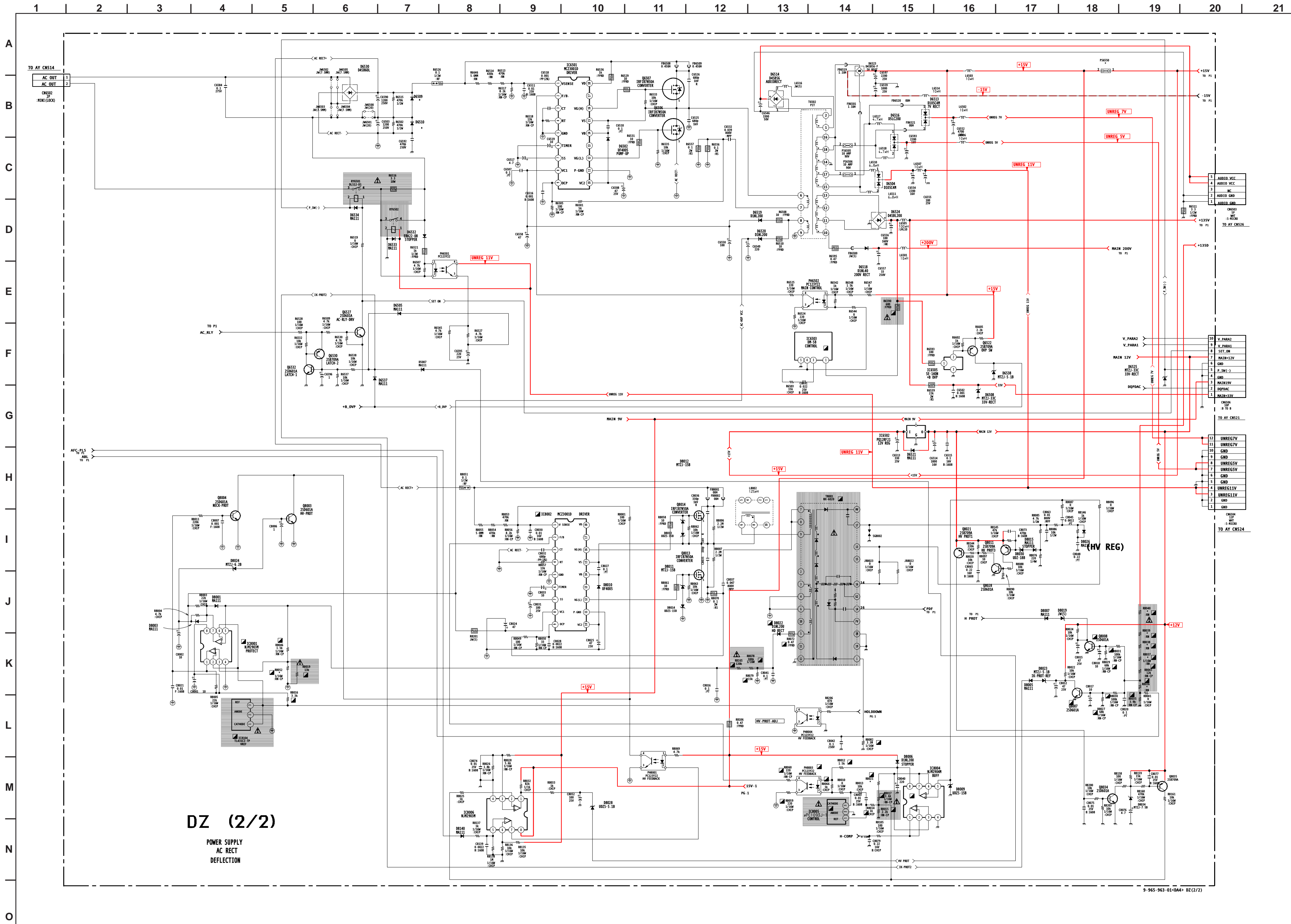
DZ BOARD IC VOLTAGE LIST

IC5001		IC5006		IC5506		6	0.0	3	2.2
PIN	VOLT	PIN	VOLT	PIN	VOLT	7	4.6	4	2.5
1	10.9	I	7.7	1	1.0	8	17.9	5	GND
2	10.9	O	6.3	2	1.0	9	0.0	6	0.0
3	N/C	G	GND	3	-15.8	10	10.5	7	4.6
4	GND	VC	N/C	4	1.7	11	GND	8	17.9
5	3.9	IC5007		5	12.0	12	4.8	9	0.0
6	3.9	PIN	VOLT	IC5511		13	N/C	10	10.5
7	4.7	1	2.4	PIN	VOLT	14	151.8	11	GND
8	12.0	2	0.7	1	4.0	15	142.2	12	4.8
IC5002		3	9.0	2	5.8	16	146.3	13	N/C
PIN	VOLT	4	1.6	3	5.8	17	N/C	14	151.8
1	5.6	5	GND	4	GND	18	306.1	15	142.2
2	2.6	6	3.9	5	2.6	IC6502		16	146.3
3	5.9	7	2.7	6	2.6	PIN	VOLT	17	N/C
4	GND	8	0.4	7	7.6	I	15.0	18	306.1
5	5.1	9	3.0	8	12.0	O	12.0	IC8004	
6	5.6	10	N/C	IC5512		G	GND	PIN	VOLT
7	4.8	11	N/C	PIN	VOLT	4	N/C	1	6.9
8	12.0	12	GND	I	-15.0	IC6503		2	6.9
IC5003		13	N/C	O	-12.0	PIN	VOLT	3	6.9
PIN	VOLT	14	0.7	G	GND	1	133.8	4	GND
1	4.7	IC5502		IC5515		2	N/C	5	6.9
2	3.9	PIN	VOLT	PIN	VOLT	3	2.5	6	6.9
3	3.9	1	6.9	1	0.0	4	11.0	7	6.9
4	GND	2	0.5	2	0.0	5	GND	8	15.0
5	GND	3	12.0	3	0.0	IC6505		IC8005	
6	GND	4	2.7	4	-11.9	PIN	VOLT	PIN	VOLT
7	GND	5	3.7	5	6.0	1	134.4	1	2.5
8	9.0	6	2.6	6	6.0	2	15.4	2	GND
IC5004		7	4.4	7	6.0	3	GND	3	9.9
PIN	VOLT	8	N/C	8	9.0	IC8001		IC8006	
1	1.2	9	2.6	IC6500		PIN	VOLT	PIN	VOLT
2	14.1	10	2.6	PIN	VOLT	1	0.1	1	0.0
3	-13.1	11	N/C	I	15.0	2	2.5	2	2.5
4	-15.3	12	GND	O	12.0	3	2.1	3	2.2
5	0.0	13	0.7	G	GND	4	GND	4	GND
6	14.6	14	0.7	4	N/C	5	2.3	5	7.5
7	1.2	IC5504		IC6501		6	2.5	6	4.5
IC5005		PIN	VOLT	PIN	VOLT	7	0.0	7	14.8
PIN	VOLT	1	1.6	1	2.8	8	17.5	8	15.0
1	99.4	2	1.6	2	1.8	IC8002		IC8104	
2	99.1	3	GND	3	2.2	PIN	VOLT	PIN	VOLT
3	94.6	4	5.4	4	2.5	1	2.6	1	2.5
4	98.8	5	12.0	5	GND	2	1.8	2	GND
5	105.0							3	2.5

All voltages are in V.



DZ BOARD SCHEMATIC DIAGRAM (2 OF 2)



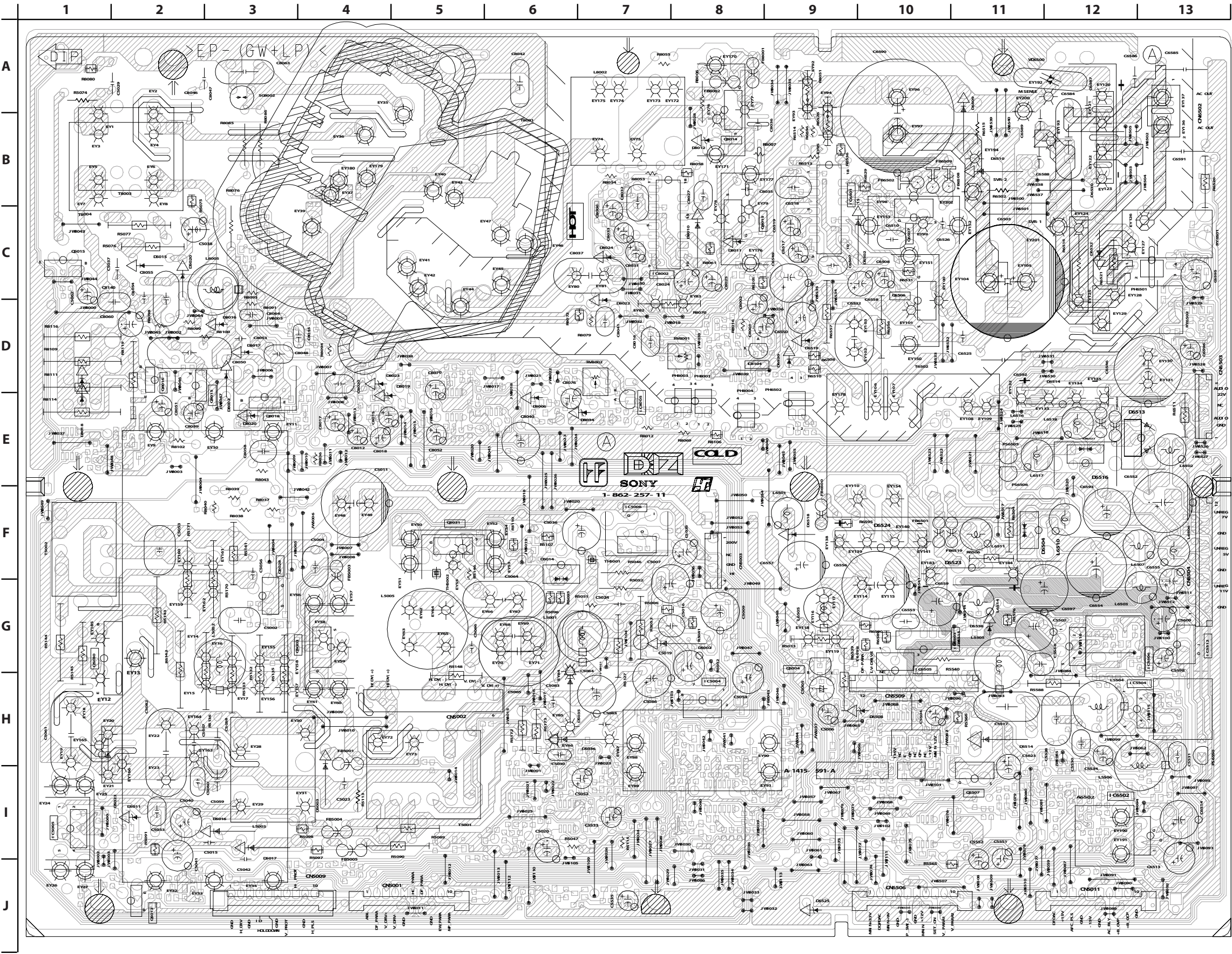
DZ BOARD TRANSISTOR VOLTAGE LIST

	B	C	E		B	C	E		D	G	S	
Q5001	4.8	12	4.9	Q5505	0.4	9.0	0.0	Q5003	10.9	128.8	135.0	
Q5002	4.8	GND	4.9	Q5506	0.0	2.7	GND		Q5028	63.9	3.8	GND
Q5004	133.3	3.7	132.7	Q5510	0.7	8.3	0.8		Q5031	14.6	2.1	GND
Q5005	0.0	14.1	0.2	Q5512	4.4	12.0	3.8		Q5507	10.5	6.9	GND
Q5006	11.2	12.0	10.7	Q5513	1.3	8.7	4.2		Q6506	140.1	4.8	GND
Q5007	11.4	12.1	12.0	Q5568	6.9	12.0	7.0		Q6507	305.6	145.1	140.1
Q5008	0.7	0.0	GND	Q5569	6.9	0.0	7.0		Q8013	136.0	4.5	GND
Q5009	0.0	0.0	GND	Q6522	15.4	0.0	15.4		Q8014	305.0	131.0	136.0
Q5010	0.1	0.8	GND	Q6527	0.8	0.1	GND		All voltages are in V.			
Q5011	0.0	0.0	GND	Q6530	3.2	0.0	3.2					
Q5012	3.4	97.5	2.9	Q6532	0.0	3.2	GND					
Q5013	2.8	GND	3.4	Q8003	0.1	2.6	GND					
Q5014	8.9	0.0	9.0	Q8004	0.1	2.6	GND					
Q5015	2.1	105.0	1.5	Q8007	0.6	0.1	GND					
Q5018	0.7	0.0	GND	Q8008	0.6	0.1	GND					
Q5019	2.2	9.0	2.1	Q8011	11.9	0.0	12.0					
Q5020	2.2	GND	2.1	Q8015	0.6	0.0	GND					
Q5021	0.9	9.0	1.3	Q8016	132.6	132.4	133.3					
Q5022	0.6	GND	1.2	Q8018	0.0	86.6	GND					
Q5023	0.2	3.9	GND	Q8019	0.6	0.0	GND					
Q5024	2.4	9.0	2.2	Q8020	0.0	0.6	GND					
Q5025	0.9	-15.0	1.3	Q8021	11.7	0.0	12.0					
Q5026	3.8	9.0	3.8	Q8022	3.4	GND	3.5					
Q5027	3.8	0.0	3.8	Q8023	3.4	9.0	3.5					
Q5030	0.0	84.3	GND	Q8028	0.0	11.7	GND					
Q5035	0.0	2.1	GND	Q8034	0.0	12.0	GND					
Q5036	0.2	3.8	GND	Q8035	11.6	2.5	12.0					
Q5501	0.5	3.4	GND									
Q5502	0.0	6.9	GND									
Q5503	0.0	0.5	GND									
Q5504	0.2	-12.0	0.8									



[H/V DRIVE, H/V, DY, POWER SUPPLY, AC RECT, DEFLECTION]

COMPONENT SIDE



DIODE		DIODE		TRANSISTOR	
D5001	F-7	D8003	C-6	Q5009	G-6
D5002	G-7	D8005	E-9	Q5010	G-6
D5003	H-10	D8006	D-8	Q5011	J-8
D5004	G-11	D8007	E-9	Q5012	J-12
D5005	G-5	D8009	D-8	Q5013	J-13
D5006	I-6	D8010	C-6	Q5014	J-8
D5007	E-9	D8011	C-6	Q5015	C-13
D5008	I-8	D8012	B-6	Q5018	J-6
D5010	J-7	D8013	B-6	Q5019	F-8
D5011	I-12	D8014	B-5	Q5020	F-8
D5014	F-8	D8015	B-11	Q5021	H-6
D5015	C-12	D8016	D-10	Q5022	I-7
D5016	I-11	D8017	D-11	Q5023	H-5
D5017	I-11	D8018	E-13	Q5024	H-6
D5018	H-7	D8019	D-10	Q5025	H-5
D5019	H-6	D8022	C-7	Q5026	H-7
D5023	H-13	D8023	D-10	Q5027	H-6
D5027	I-9	D8024	C-7	Q5028	F-11
D5028	H-7	D8026	D-10	Q5030	G-12
D5032	I-12	D8028	E-9	Q5031	F-9
D5035	H-8	D8030	B-11	Q5035	H-9
D5036	H-8	D8034	E-7	Q5036	H-7
D5501	H-5	D8140	G-6	Q5501	I-4
D5502	H-4	IC		Q5502	H-4
D5504	G-1	IC5001	I-9	Q5503	H-4
D5506	H-5	IC5002	I-8	Q5504	G-1
D5508	G-1	IC5003	E-13	Q5505	G-1
D5511	I-3	IC5004	G-6	Q5506	H-5
D5512	I-2	IC5005	I-13	Q5507	H-3
D5513	I-4	IC5006	F-7	Q5510	H-3
D5514	H-3	IC5007	I-6	Q5512	I-1
D5515	I-4	IC5502	H-5	Q5513	I-2
D6502	C-4	IC5504	H-2	Q5568	H-4
D6504	F-3	IC5506	G-3	Q5569	H-4
D6505	C-1	IC5511	H-2	Q6506	C-4
D6508	H-5	IC5512	G-1	Q6507	C-4
D6509	A-3	IC5515	I-4	Q6522	G-3
D6510	B-3	IC6501	C-5	Q6527	C-1
D6513	D-2	IC6502	J-1	Q6530	D-1
D6514	D-3	IC6503	F-4	Q6532	D-1
D6516	E-2	IC6505	G-4	Q8003	B-7
D6518	F-5	IC8001	D-6	Q8004	C-7
D6519	D-5	IC8002	C-6	Q8007	D-9
D6520	D-5	IC8004	E-9	Q8008	E-10
D6521	I-1	IC8005	D-7	Q8011	B-11
D6523	F-4	IC8006	E-9	Q8013	B-6
D6524	F-4	IC8104	D-6	Q8014	A-6
D6525	F-4	TRANSISTOR		Q8015	D-12
D6530	A-2	Q5001	F-11	Q8016	D-12
D6532	B-2	Q5002	F-11	Q8018	D-11
D6533	C-1	Q5003	G-10	Q8019	E-12
D6534	C-1	Q5004	G-5	Q8020	E-12
D6537	H-5	Q5005	F-6	Q8021	C-11
D6538	G-3	Q5006	H-8	Q8022	D-11
D8001	D-6	Q5007	H-7	Q8023	D-10
D8002	D-11	Q5008	I-7	Q8028	C-11
				Q8034	D-8
				Q8035	E-7

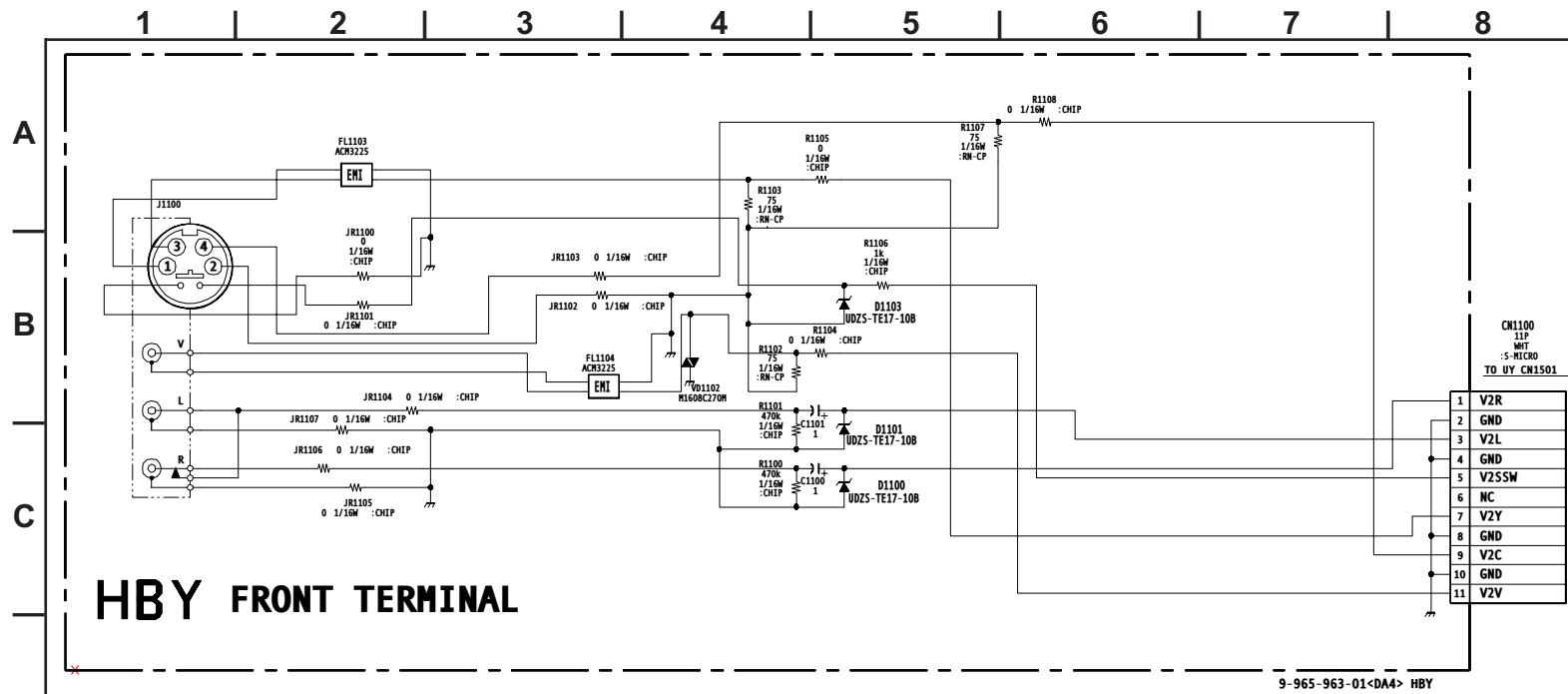


All voltages are in V.

UY BOARD TRANSISTOR VOLTAGE LIST

All voltages are in V.

HBV BOARD SCHEMATIC DIAGRAM



UY

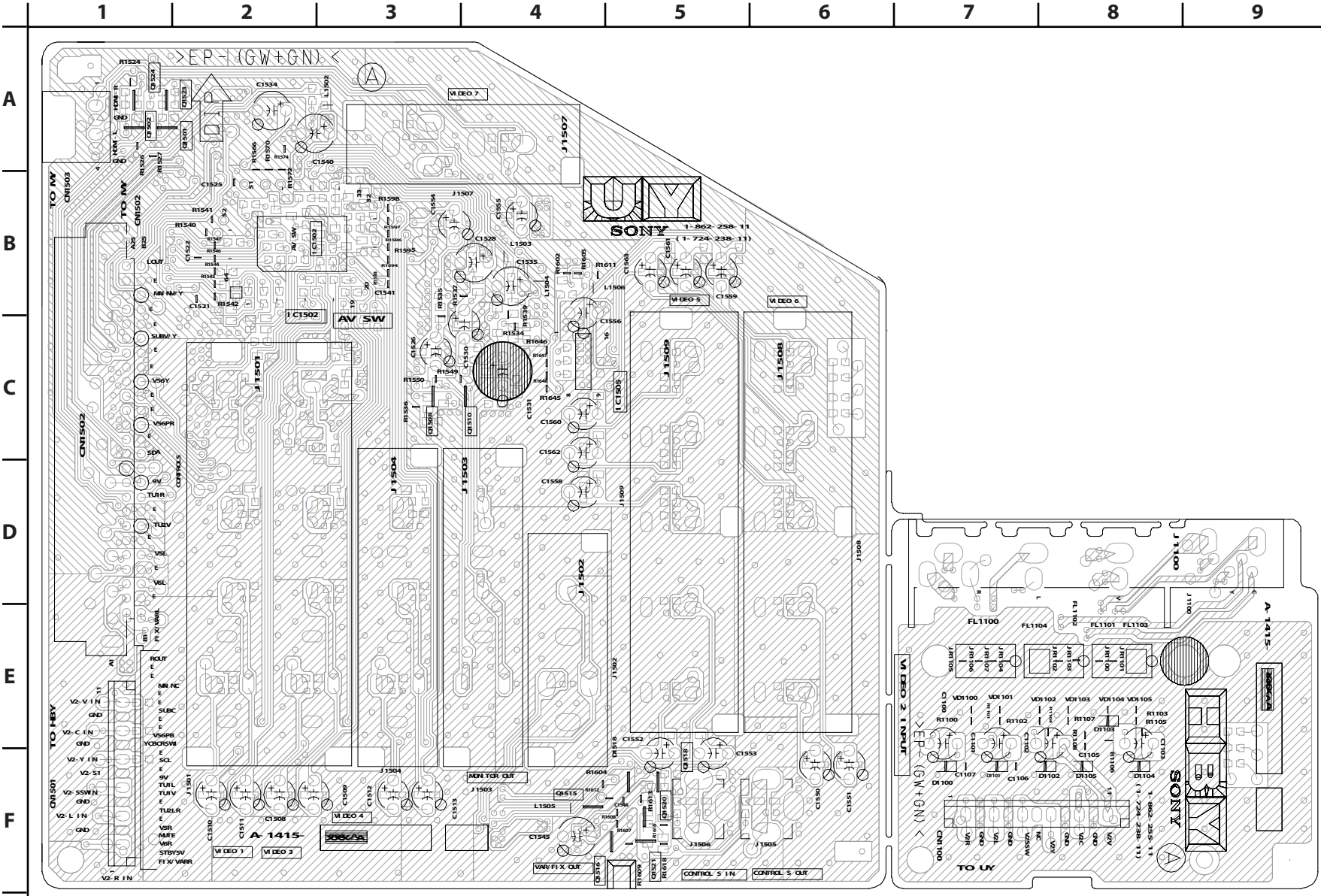
[AV SWITCH, TERMINAL BLOCK]

COMPONENT SIDE

HBV

[FRONT TERMINAL]

COMPONENT SIDE



UY BOARD LOCATOR LIST
COMPONENT SIDE

DIODE		TRANSISTOR	
D1518	E-5	Q1501	A-2
IC		Q1502	A-1
IC1502	B-2	Q1508	C-3
IC1505	C-5	Q1510	C-4
		Q1515	F-4
		Q1516	F-4
		Q1518	E-5
		Q1520	F-5
		Q1521	F-5
		Q1523	A-2
		Q1524	A-1

UY

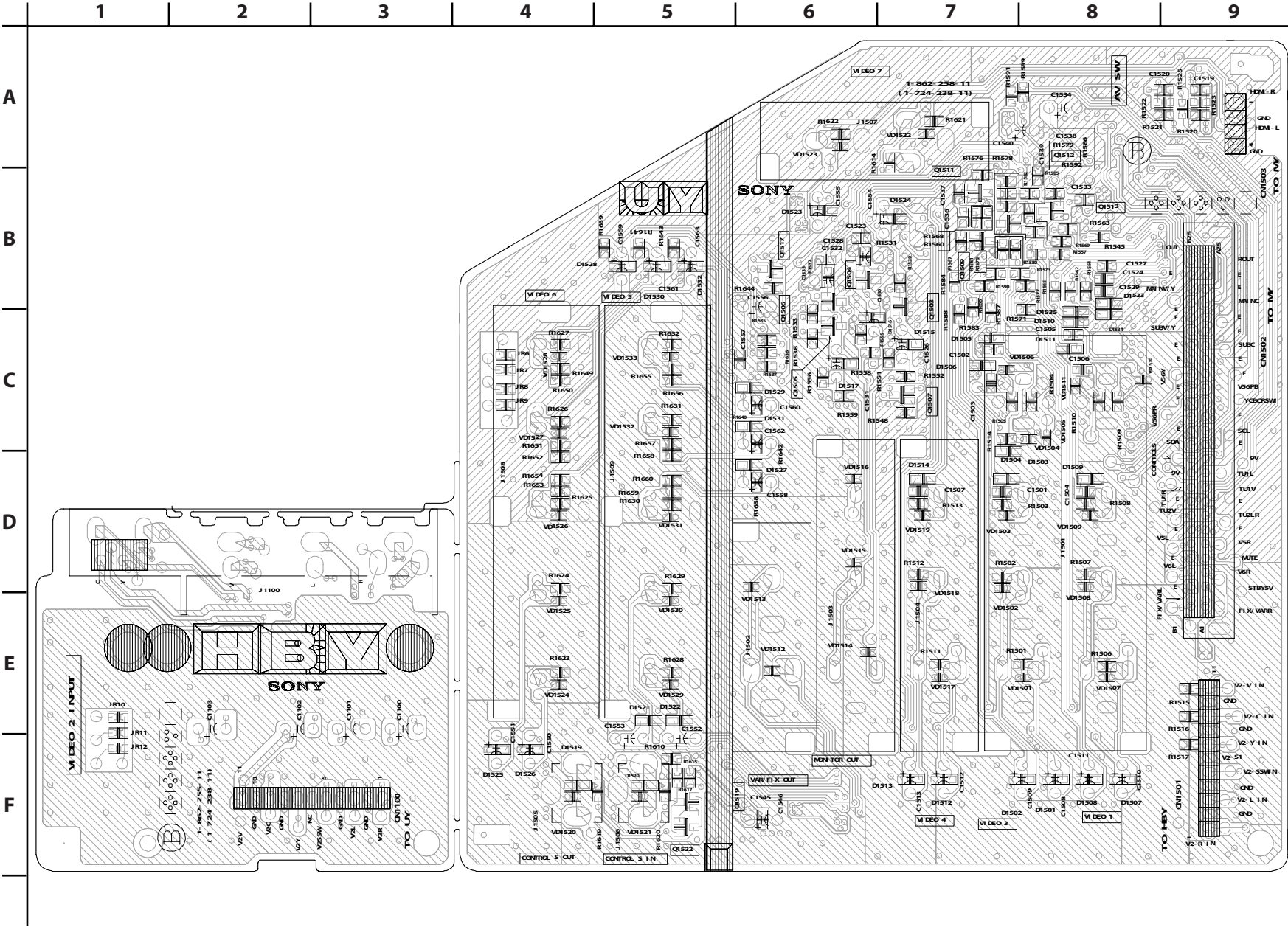
[A/V SWITCH, TERMINAL BLOCK]

CONDUCTOR SIDE

HBV

[FRONT TERMINAL]

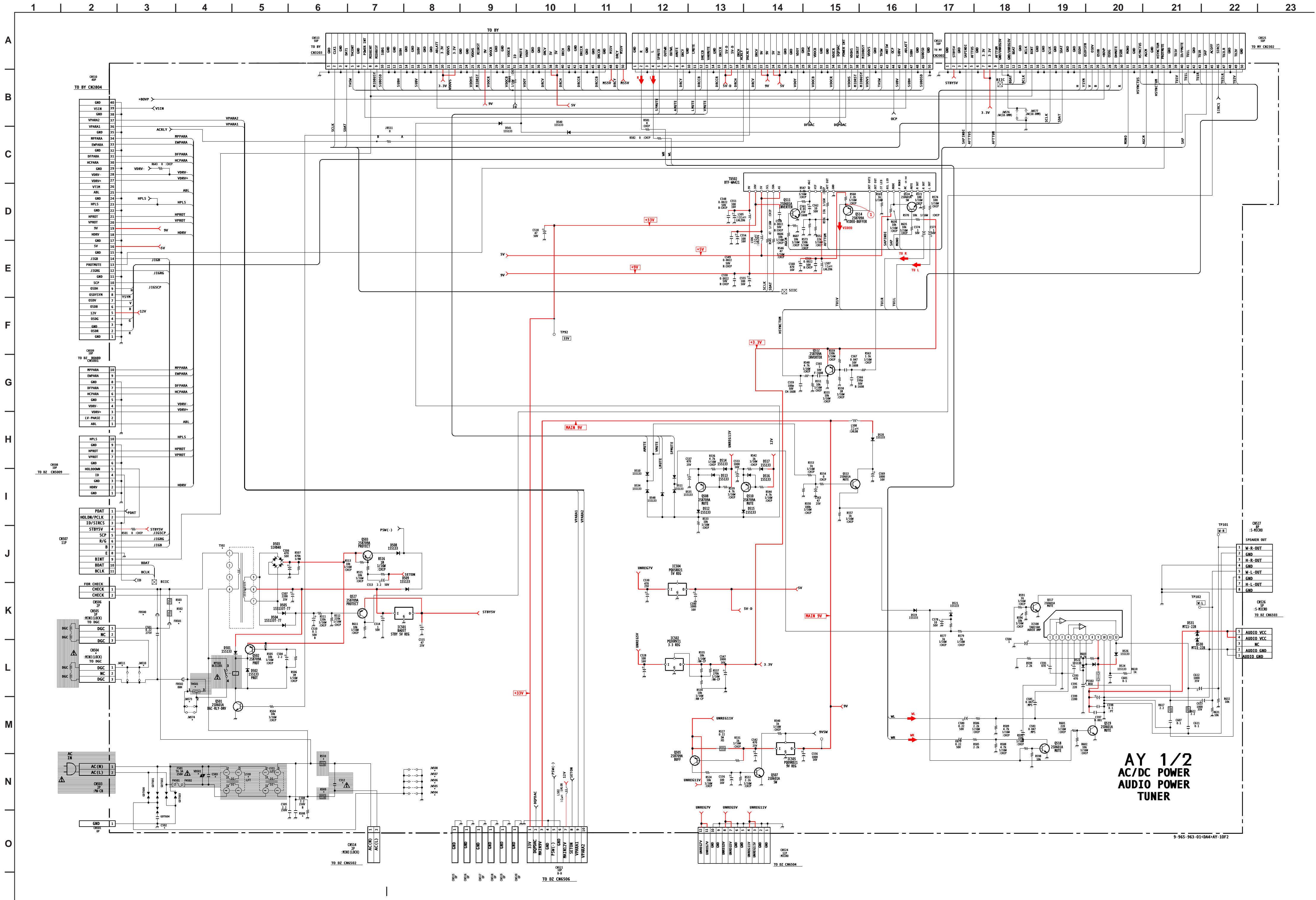
CONDUCTOR SIDE



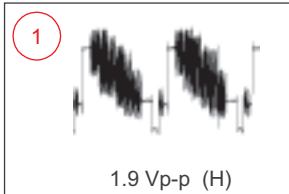
UY BOARD LOCATOR LIST
CONDUCTOR SIDE

DIODE		DIODE		DIODE	
D1501	F-8	D1510	C-8	D1520	F-5
D1502	F-7	D1511	C-8	D1521	E-5
D1503	D-8	D1512	F-7	D1522	E-5
D1504	D-7	D1513	F-7	D1523	B-6
D1505	C-7	D1514	D-3	D1524	B-7
D1506	C-7	D1515	C-7	D1525	F-4
D1507	F-8	D1516	C-7	D1526	F-4
D1508	F-8	D1517	C-6	D1527	D-6
D1509	D-8	D1519	F-4	D1528	B-5
DIODE		TRANSISTOR			
D1529	C-6	Q1503	F-5		
D1530	C-5	Q1504	B-6		
D1531	C-6	Q1505	C-6		
D1532	B-5	Q1506	C-6		
D1533	E-8	Q1507	C-7		
D1534	C-8	Q1509	C-7		
D1535	C-8	Q1511	B-7		
		Q1512	B-8		
		Q1513	B-8		
		Q1519	F-6		
		Q1522	F-5		

AY BOARD SCHEMATIC DIAGRAM (1 OF 2)



AY BOARD WAVEFORM



AY BOARD IC VOLTAGE LIST

IC501		IC508		8	3.3
PIN	VOLT	PIN	VOLT	9	GND
I	7.0	1	1.6	IC903	
O	5.0	2	0.1		
GND	GND	3	GND	1	4.9
IC502		4	0.1	2	4.9
		5	1.6	3	4.9
I	5.0	6	7.9	4	4.9
O	3.3	7	11.0	5	N/C
GND	GND	8	5.1	6	5.0
4	3.4	9	24.0	7	5.0
IC504		10	0.0	8	5.0
		11	4.4	9	5.0
I	7.0	12	10.6	10	12.0
O	5.0	IC900		11	4.5
GND	GND			12	5.0
4	N/C	1	3.3	13	5.0
IC505		2	3.3	14	1.2
		3	0.1	15	5.0
I	11.0	4	-15.7	16	4.6
O	9.0	5	GND	17	4.6
GND	GND	6	15.3	18	GND
4	2.3	7	N/C	All voltages are in V.	

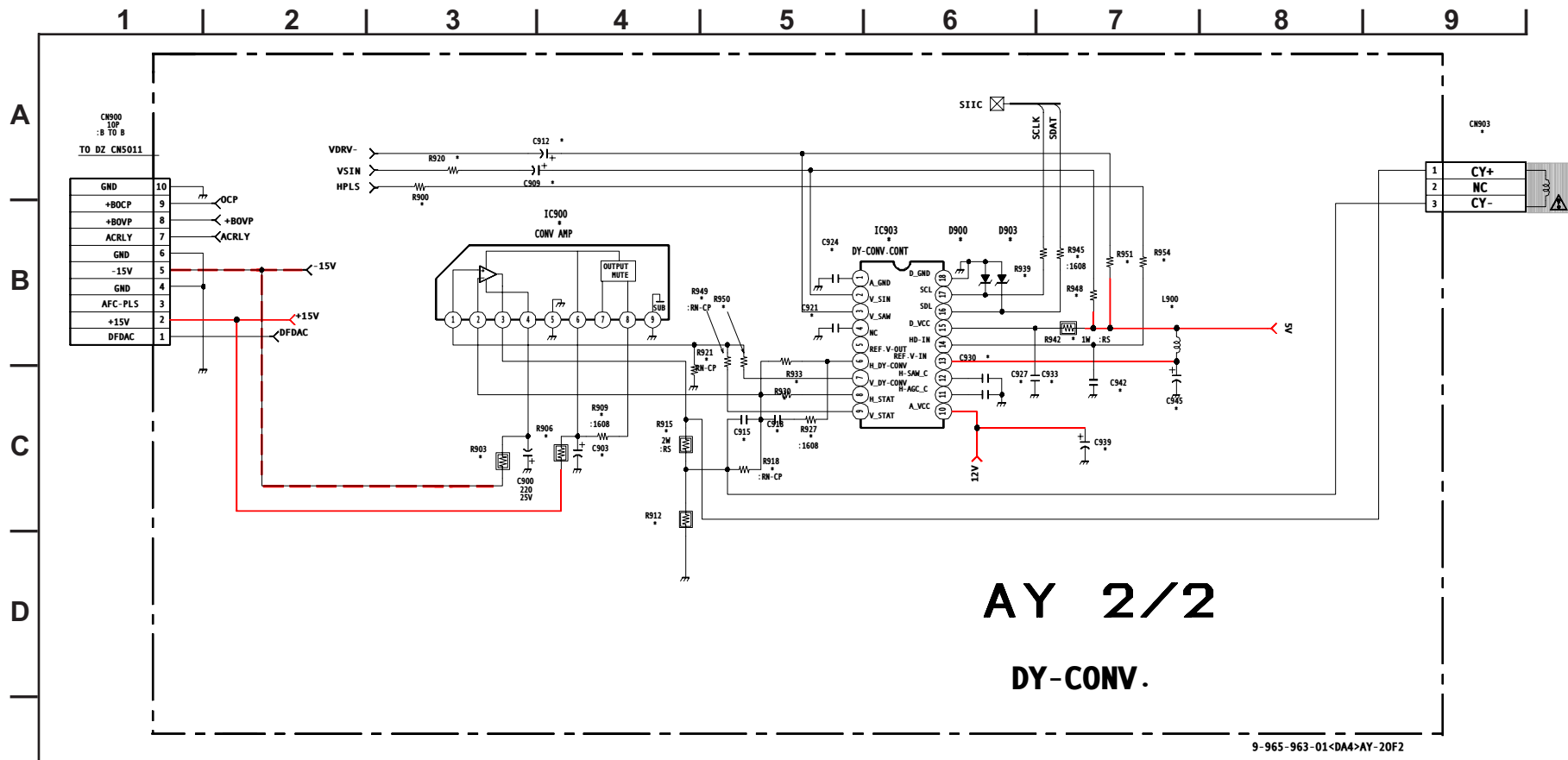
AY BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q501	0.1	19.4	GND
Q502	21.3	19.4	21.3
Q503	21.2	0.2	21.3
Q505	10.0	0.1	11.0
Q507	0.1	2.3	GND
Q508	10.5	0.3	0.0
Q510	12.0	0.0	12.0
Q511	0.1	7.5	GND
Q512	3.3	0.5	3.3
Q513	0.0	9.0	0.0
Q514	5.9	GND	6.5
Q517	0.0	4.4	GND
Q518	0.0	0.0	GND
Q519	0.0	0.0	GND
Q524	0.7	0.1	GND
Q527	9.8	0.0	5.0

All voltages are in V.

AY 1/2
AC/DC POWER
AUDIO POWER
TUNER

AY BOARD SCHEMATIC DIAGRAM (2 OF 2)

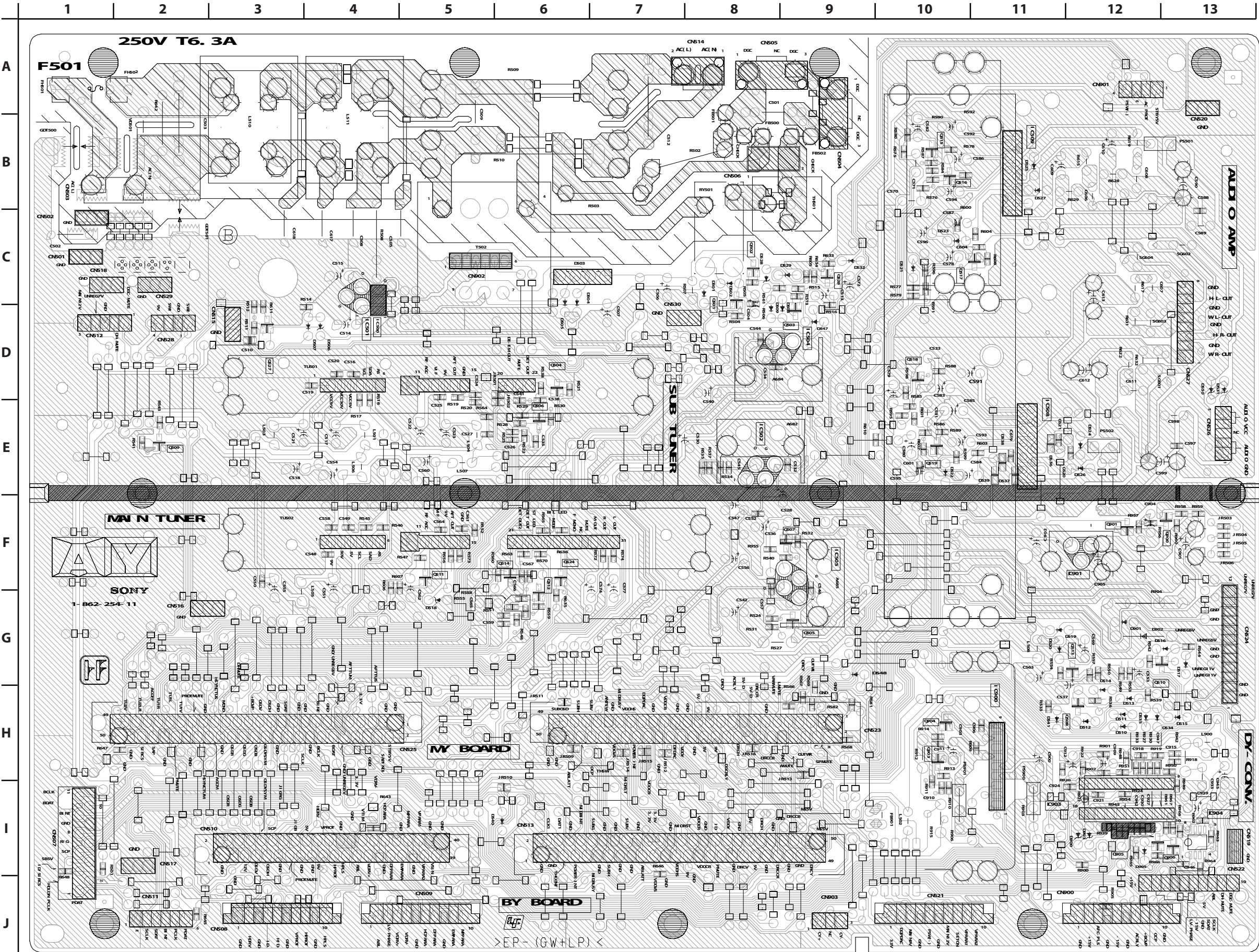




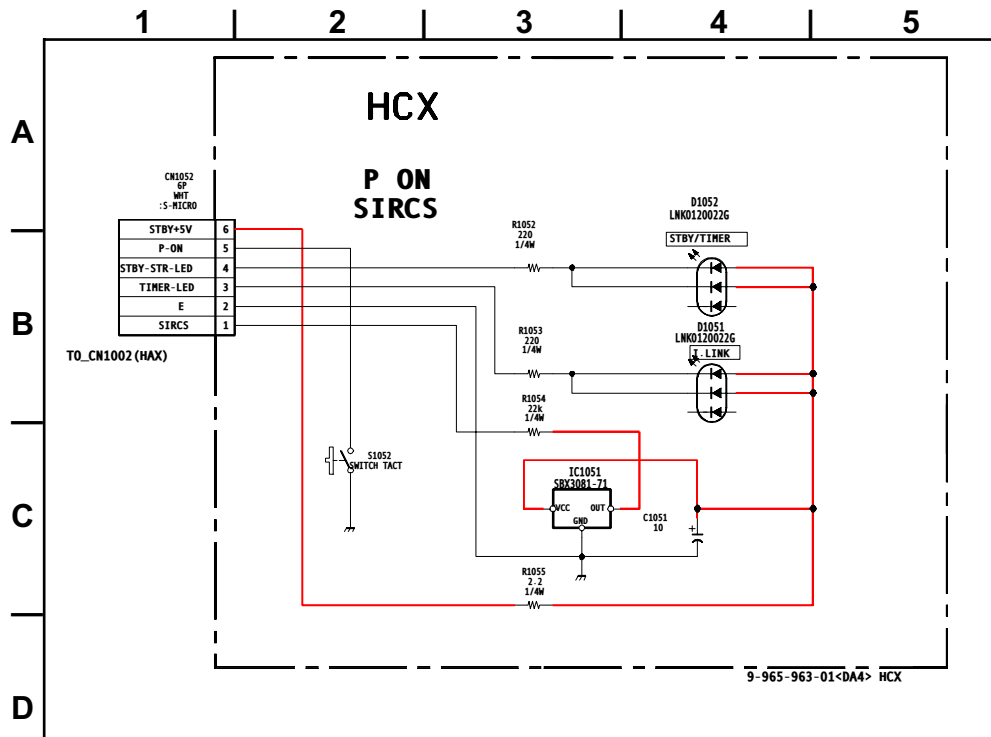
[AC/DC POWER, AUDIO POWER, TUNER, DY CONV.]
CONDUCTOR SIDE

AY BOARD LOCATOR LIST
CONDUCTOR SIDE

DIODE		IC	
D501	C-8	IC501	C-8
D502	C-8	IC502	C-8
D503	C-6	IC504	D-9
D504	C-7	IC505	F-9
D505	D-6	IC508	E-11
D508	C-9	IC900	G-10
D509	C-9	IC903	I-11
D510	H-12	TRANSISTOR	
D511	H-12	Q501	C-8
D512	H-12	Q502	C-8
D513	G-12	Q503	D-9
D514	G-12	Q505	G-9
D515	H-13	Q507	F-9
D516	G-13	Q508	H-12
D517	G-13	Q510	G-12
D519	G-12	Q511	F-5
D520	G-12	Q512	F-6
D521	C-10	Q513	G-11
D522	E-10	Q514	F-6
D524	E-12	Q517	C-10
D526	E-12	Q518	D-10
D530	D-13	Q519	E-10
D531	D-13	Q524	F-6
D534	H-12	Q527	D-3
D535	H-11		
D540	I-6		
D541	H-11		
D900	I-11		
D903	I-12		



HCX BOARD SCHEMATIC DIAGRAM



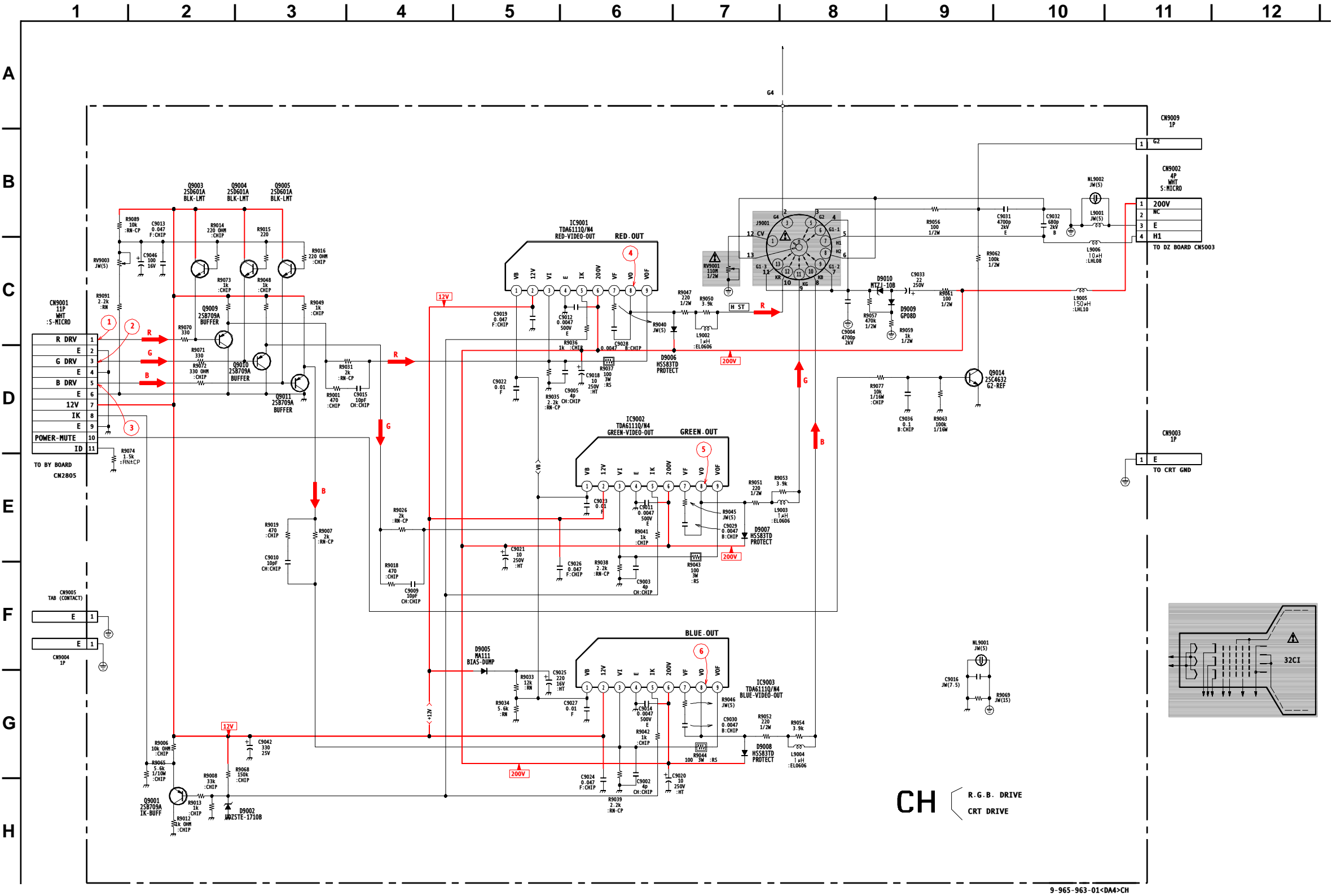
COMPONENT SIDE



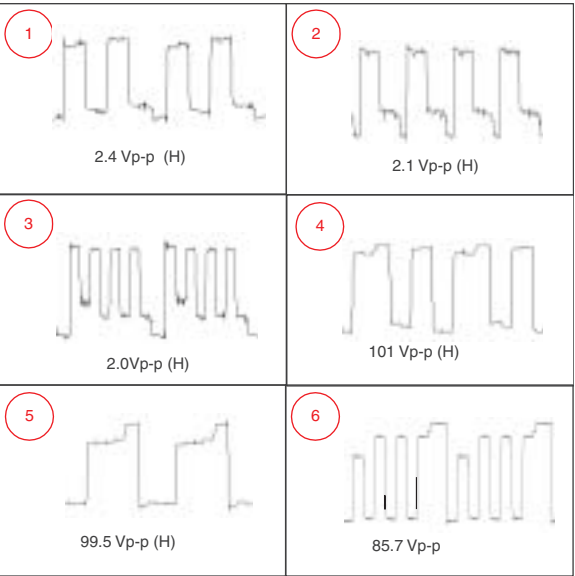
CONDUCTOR SIDE



CH BOARD SCHEMATIC DIAGRAM



CH BOARD WAVEFORMS



CH BOARD IC VOLTAGE LIST

IC9001		IC9002		IC9003	
PIN	VOLT	PIN	VOLT	PIN	VOLT
1	3.5	1	3.5	1	3.5
2	12.0	2	12.0	2	12.0
3	3.5	3	3.5	3	3.5
4	GND	4	GND	4	GND
5	9.4	5	9.2	5	9.2
6	200.0	6	200.0	6	200.0
7	32.1	7	124.5	7	3.0
8	144.4	8	154.0	8	145.0
9	2.2	9	124.0	9	24.5

All voltages are in V.

CH BOARD TRANSISTOR VOLTAGE LIST

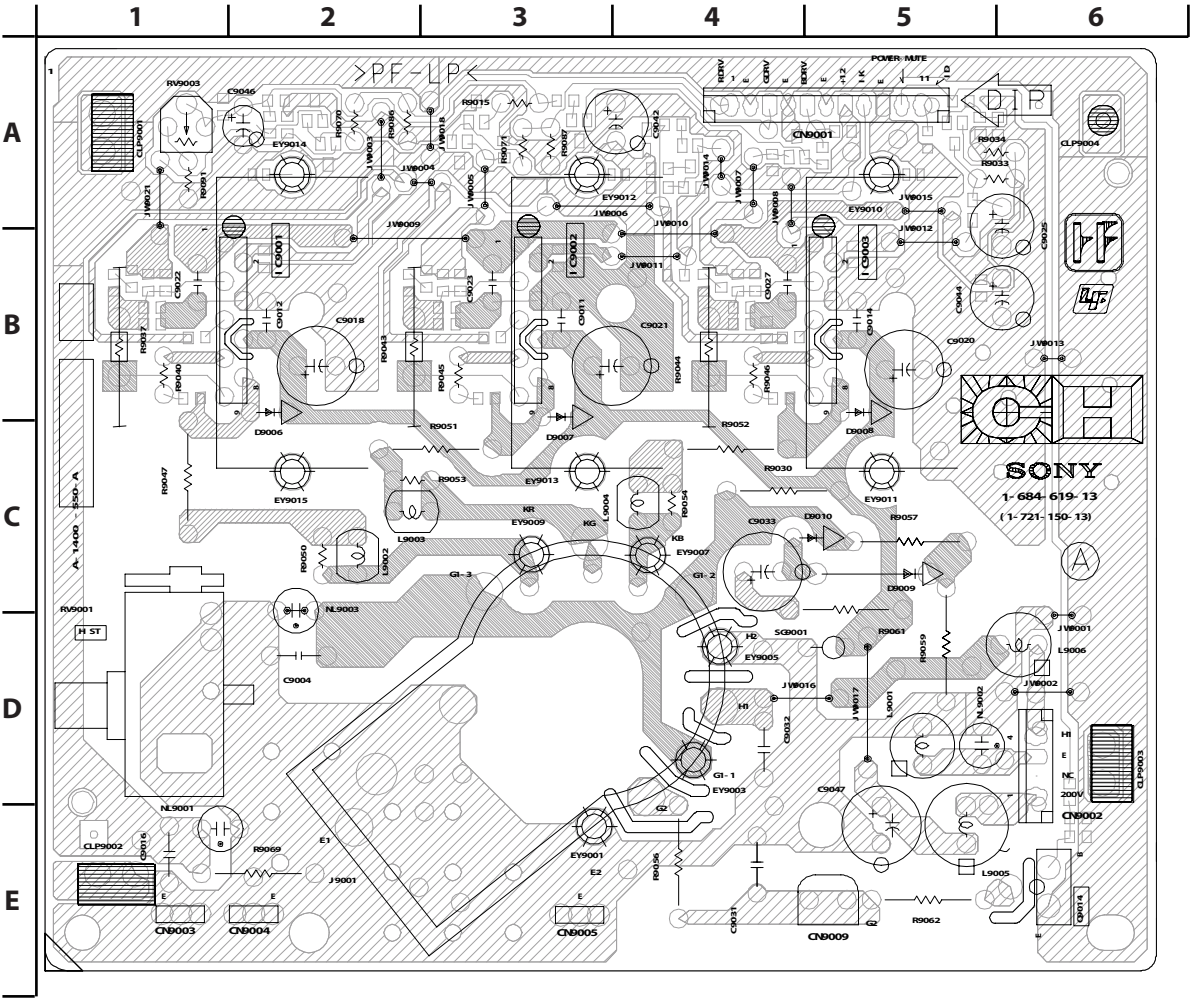
	B	C	E
Q9001	8.6	GND	3.6
Q9003	2.2	12.0	3.6
Q9004	2.2	12.0	3.7
Q9005	2.2	12.0	3.5
Q9007	9.1	12.0	8.4
Q9009	3.7	GND	4.3
Q9010	3.7	GND	4.4
Q9011	3.5	GND	4.2
Q9014	0.0	264.7	GND

All voltages are in V.



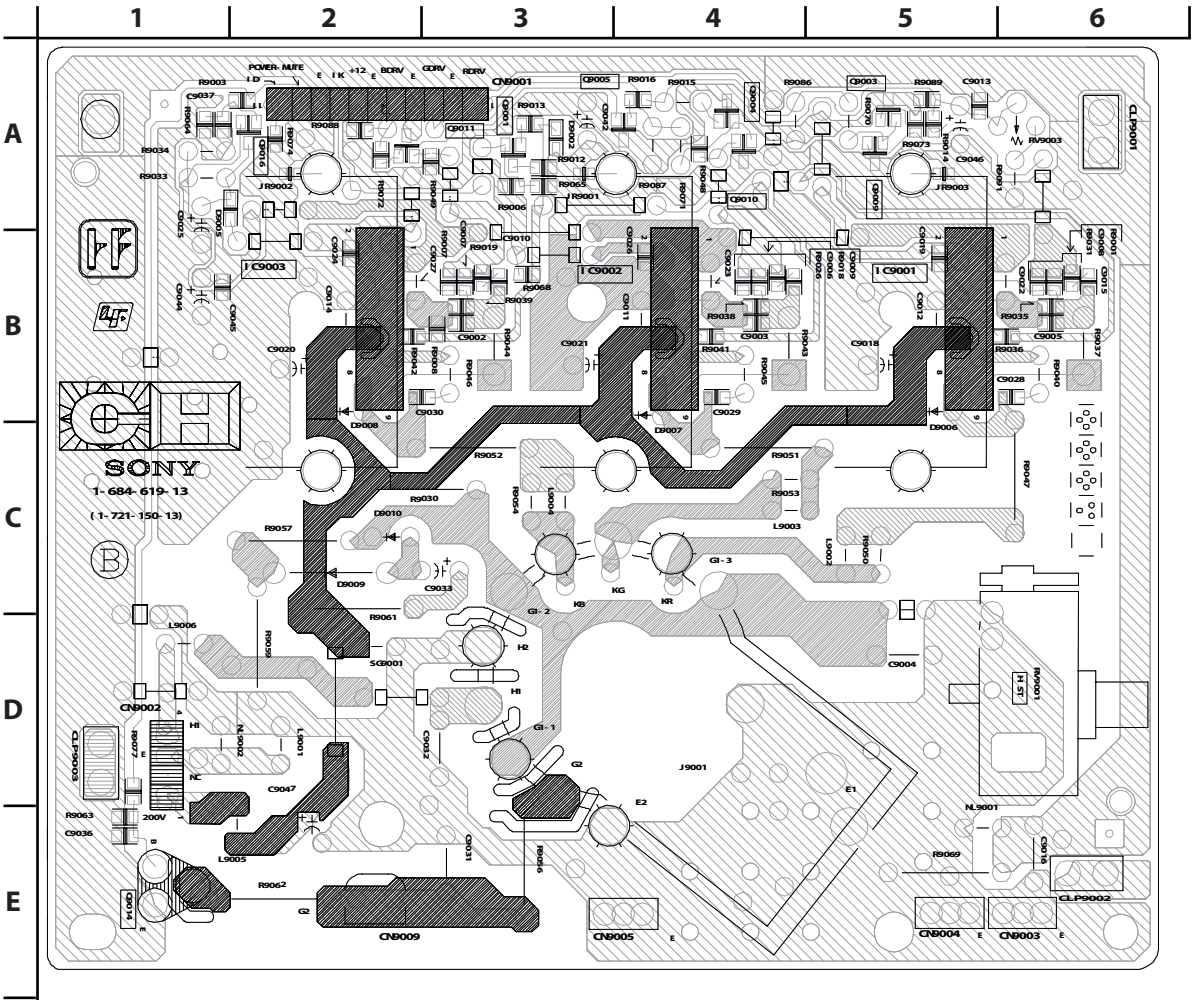
[R.G.B. DRIVE, CRT DRIVE]

COMPONENT SIDE

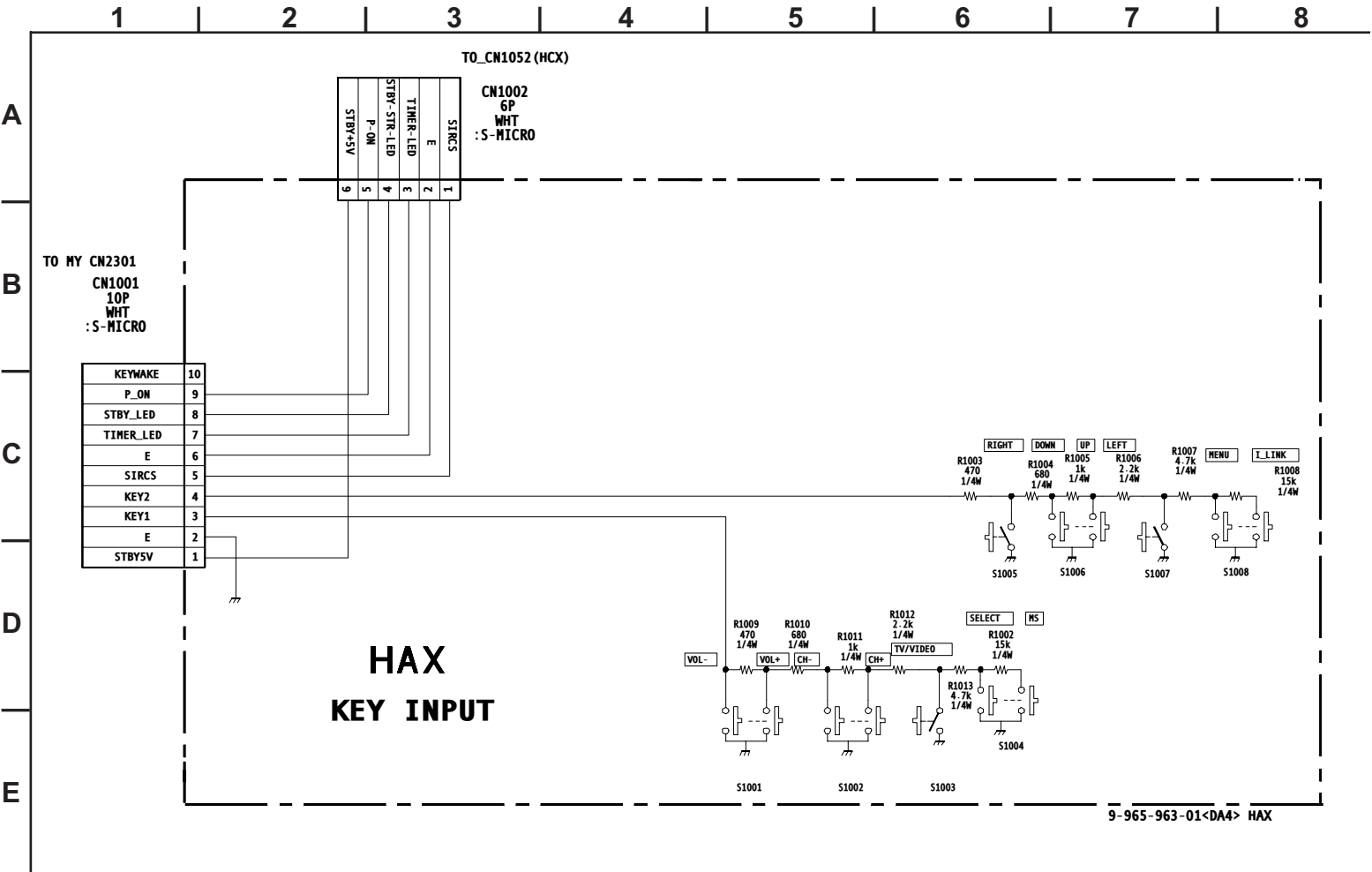


[R.G.B. DRIVE, CRT DRIVE]

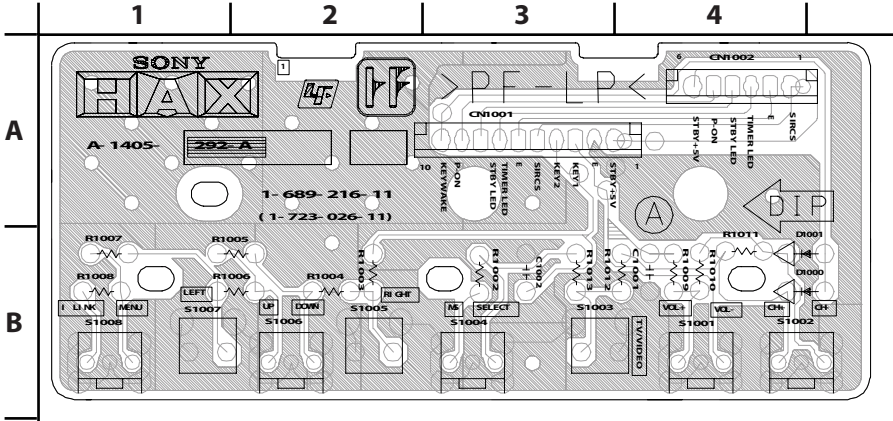
CONDUCTOR SIDE



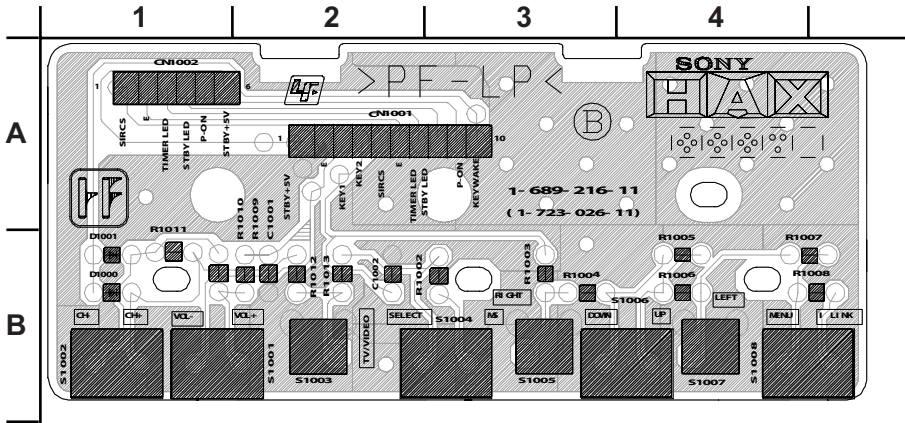
HAX BOARD SCHEMATIC DIAGRAM



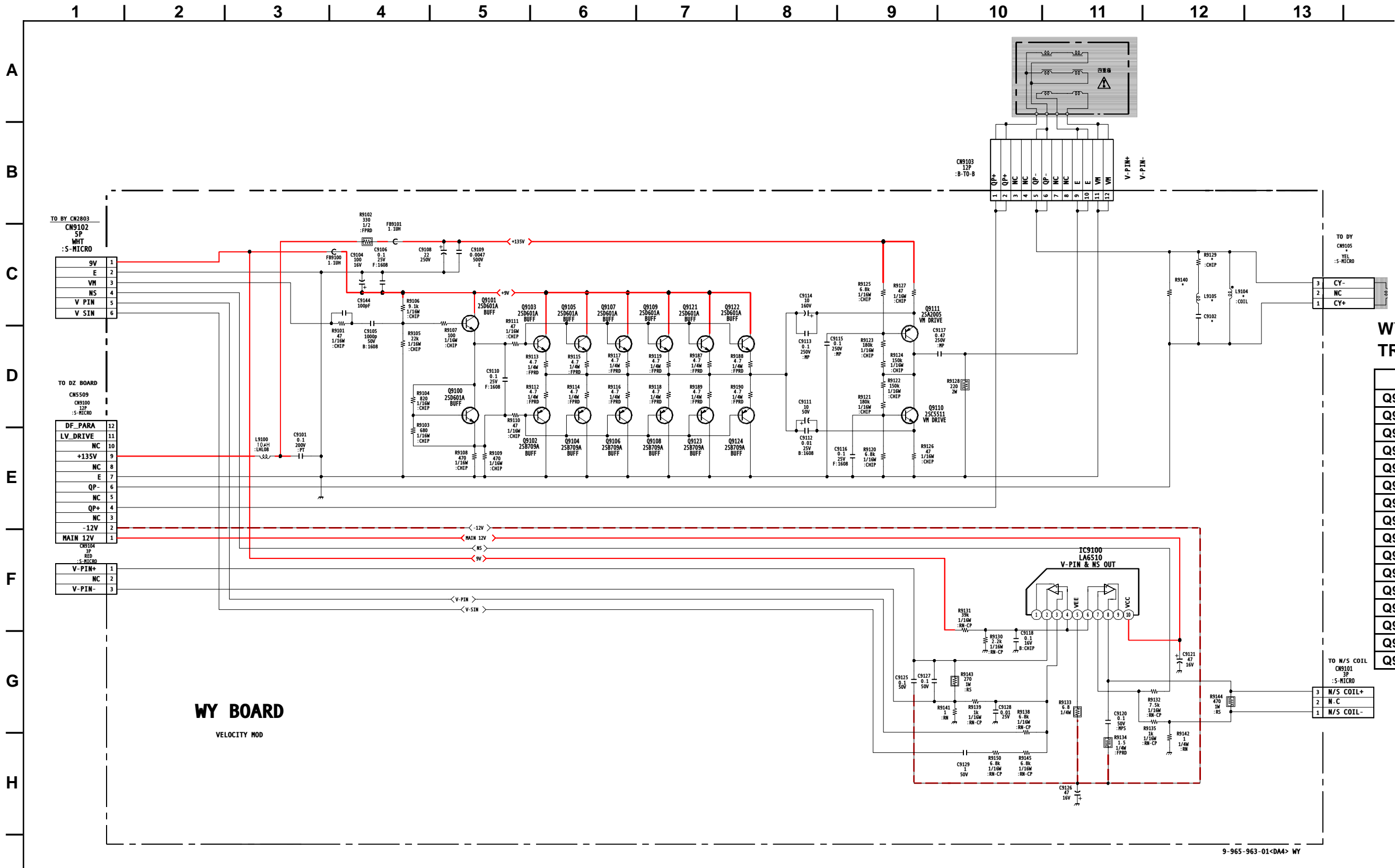
HAX [KEY INPUT]
COMPONENT SIDE



HAX [KEY INPUT]
CONDUCTOR SIDE



WY BOARD SCHEMATIC DIAGRAM



WY BOARD IC VOLTAGE LIST

IC9100	
PIN	VOLT
1	NC
2	0.0
3	0.0
4	0.5
5	-12.0
6	0.5
7	0.5
8	0.0
9	NC
10	12.0

All voltages are in V.

WY BOARD TRANSISTOR VOLTAGE LIST

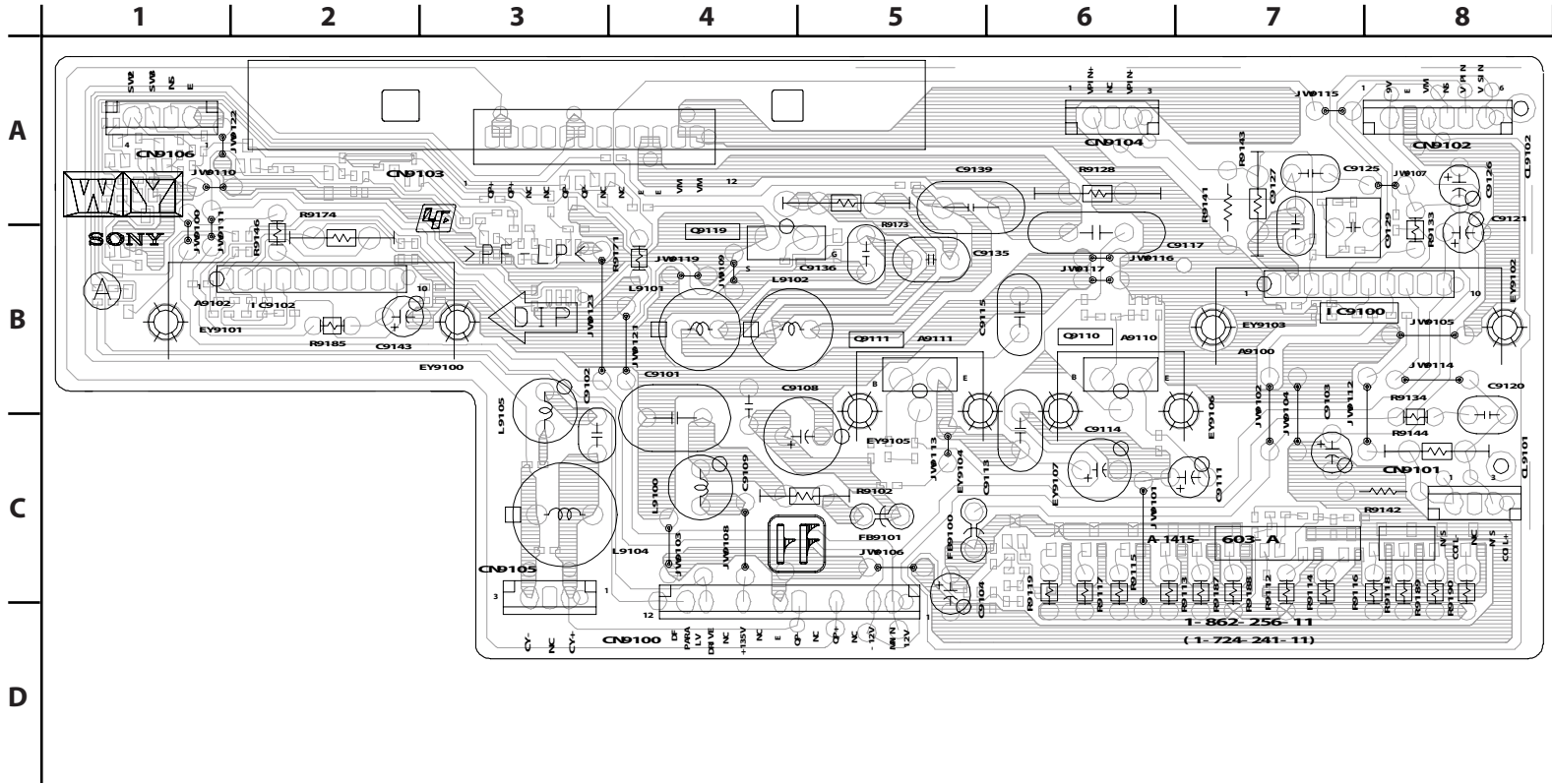
	B	C	E
Q9100	4.3	5.2	3.6
Q9101	0.0	9.0	5.2
Q9102	3.6	GND	4.3
Q9103	5.1	9.0	4.5
Q9104	3.6	GND	4.3
Q9105	5.1	9.0	4.5
Q9106	3.6	GND	4.3
Q9107	5.1	9.0	4.5
Q9108	3.6	GND	4.3
Q9109	5.1	9.0	4.5
Q9110	0.8	66.7	0.2
Q9111	133.8	66.7	134.3
Q9121	5.1	9.0	4.5
Q9122	5.1	9.0	4.5
Q9123	3.6	GND	4.3
Q9124	3.6	GND	4.3

All voltages are in V.



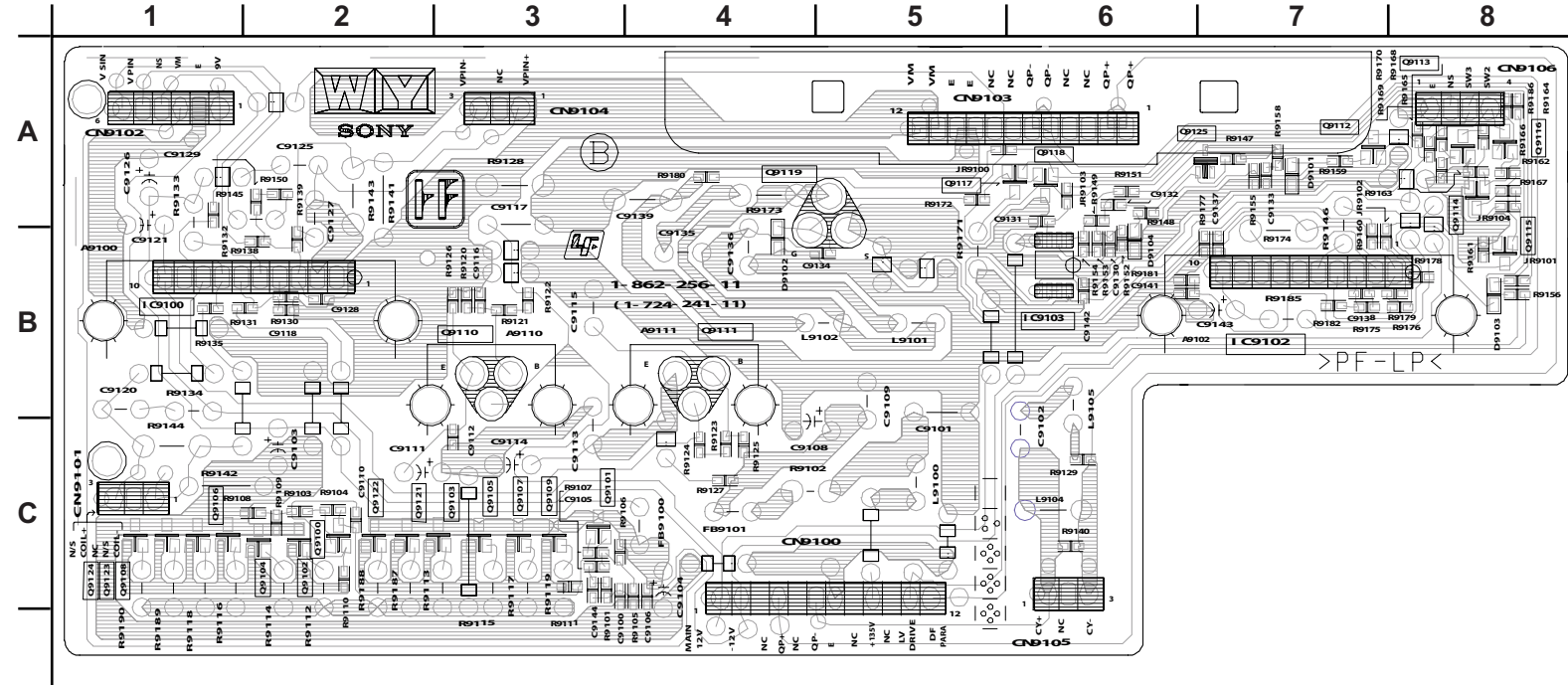
[VELOCITY MOD]

COMPONENT SIDE



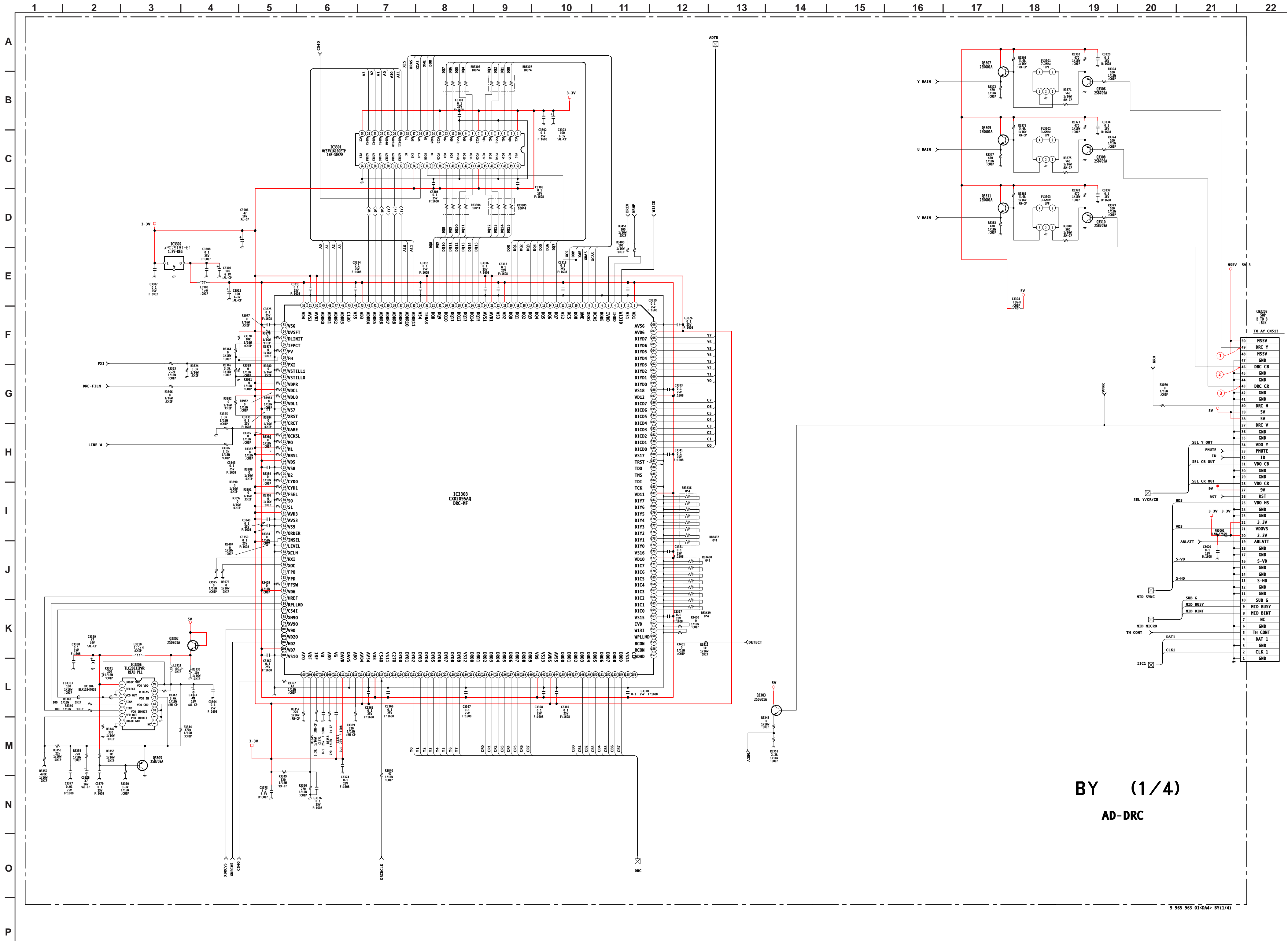
[VELOCITY MOD]

CONDUCTOR SIDE

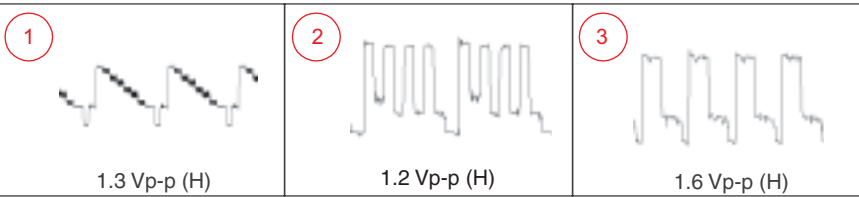


BY BOARD SCHEMATIC DIAGRAM (1 OF 4)

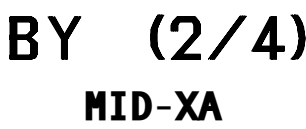
Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.



BY BOARD WAVEFORMS

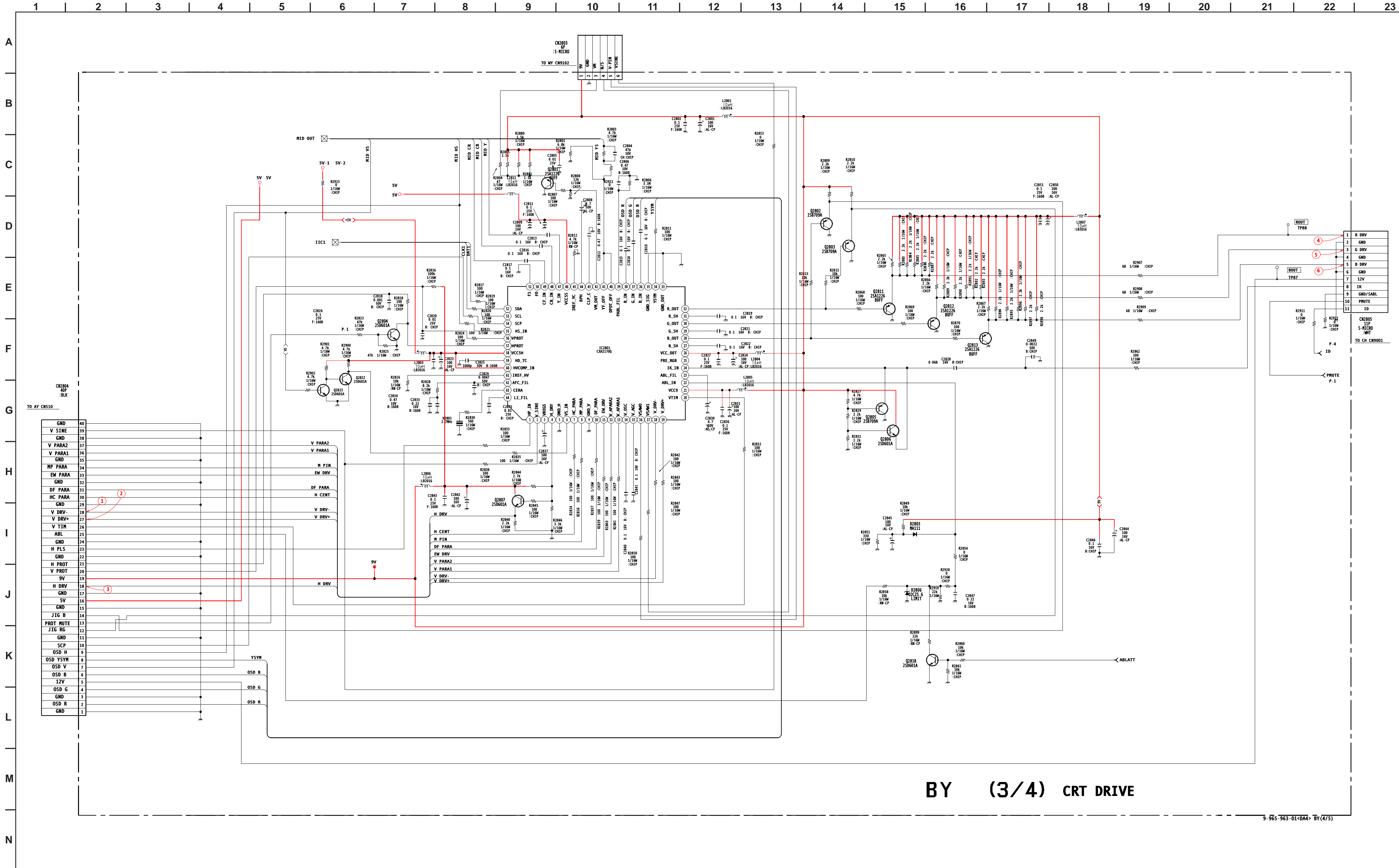


KV-27HS420/29DRC420/30HS420/32HS420/34HS420/36HS420

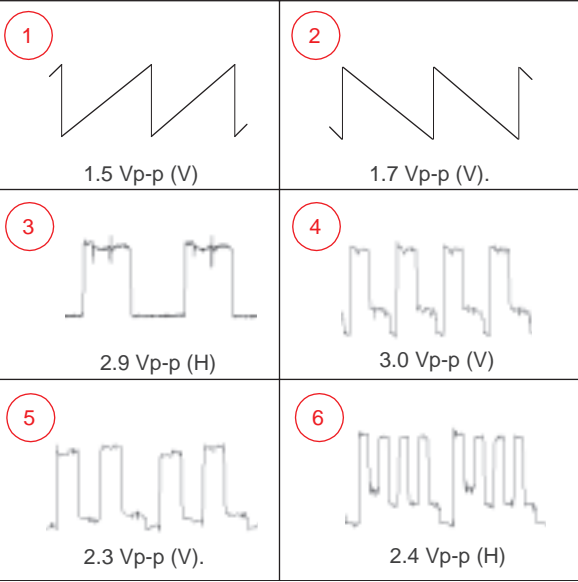


BY BOARD SCHEMATIC DIAGRAM (3 OF 4)

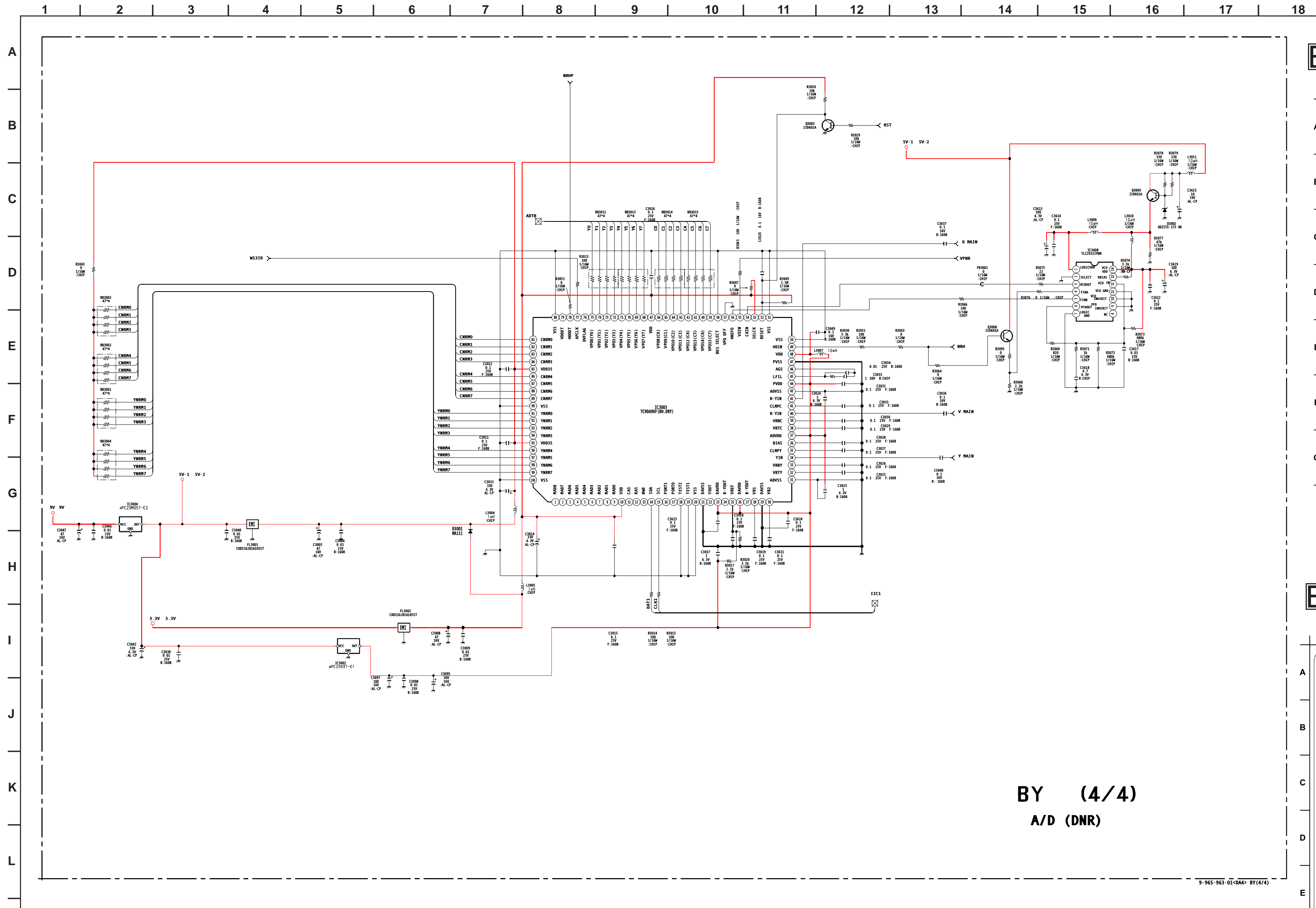
Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.



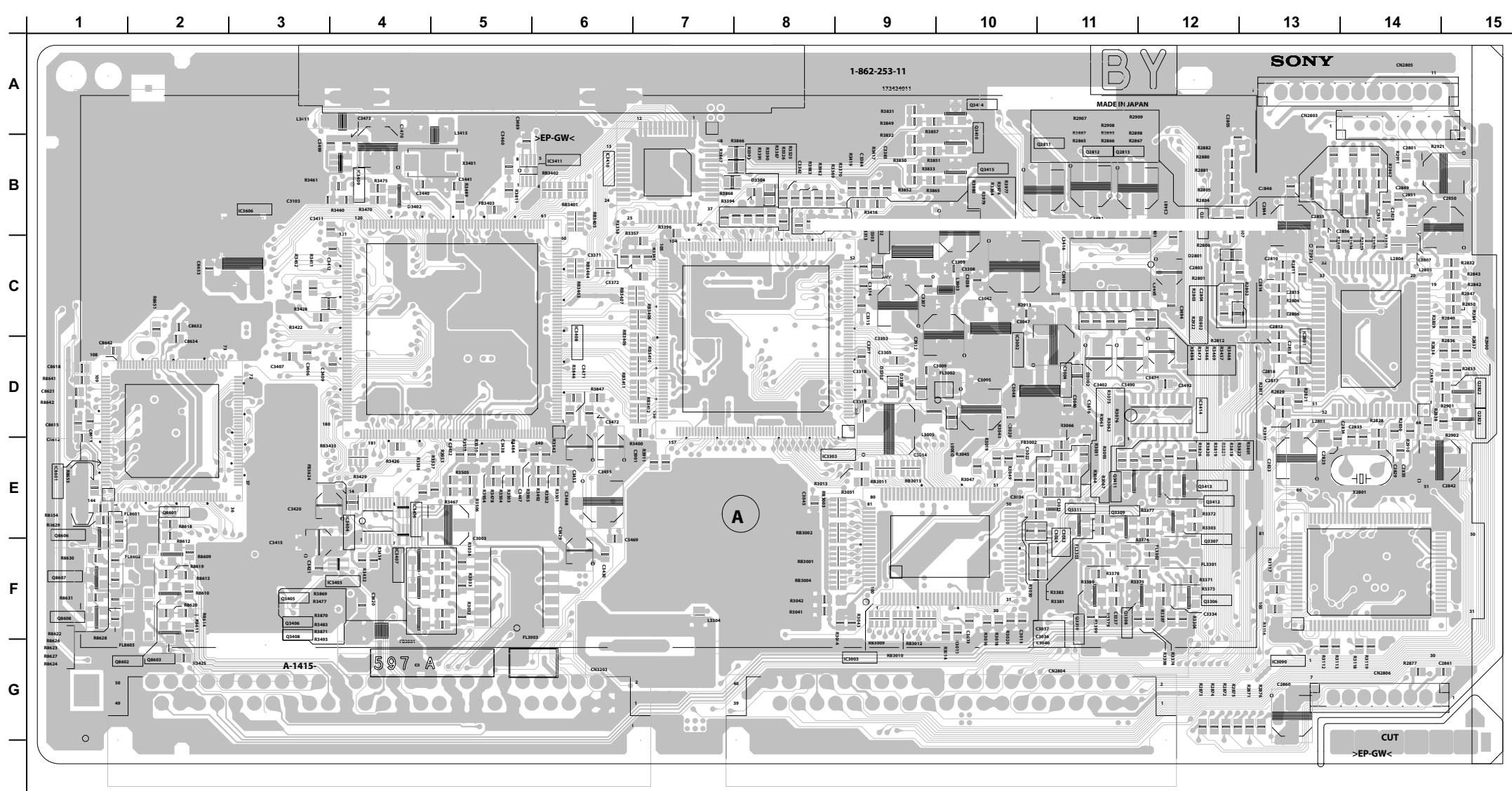
BY BOARD WAVEFORMS



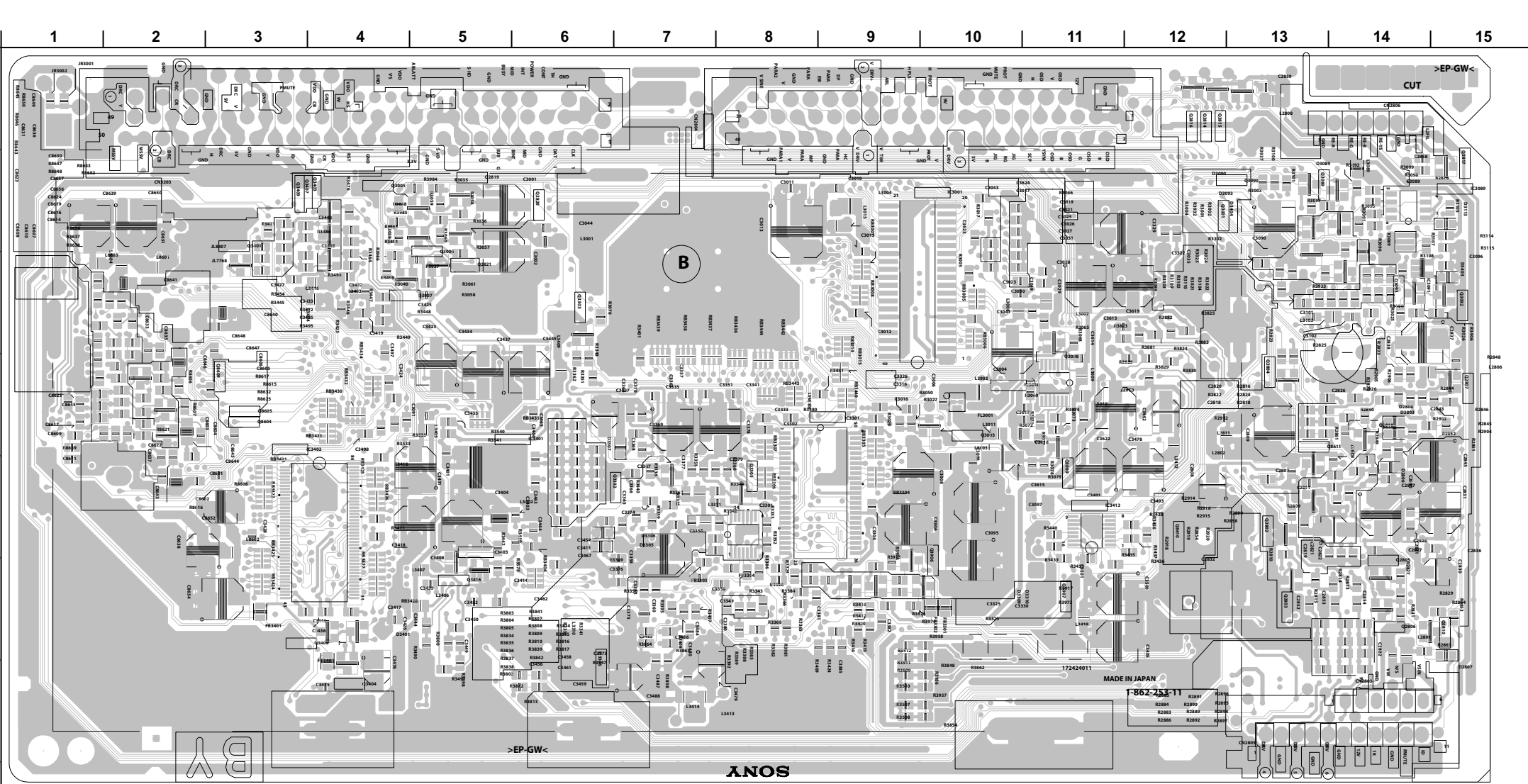
BY BOARD SCHEMATIC DIAGRAM (4 OF 4) Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.

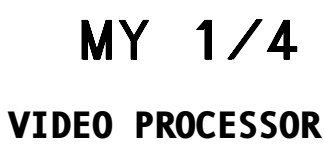







BY [AD-DRC, MID-XA, CRT DRIVE, A/D (DNR)]
COMPONENT SIDE



BY [AD-DRC, MID-XA, CRT DRIVE, A/D (DNR)]
CONDUCTOR SIDE

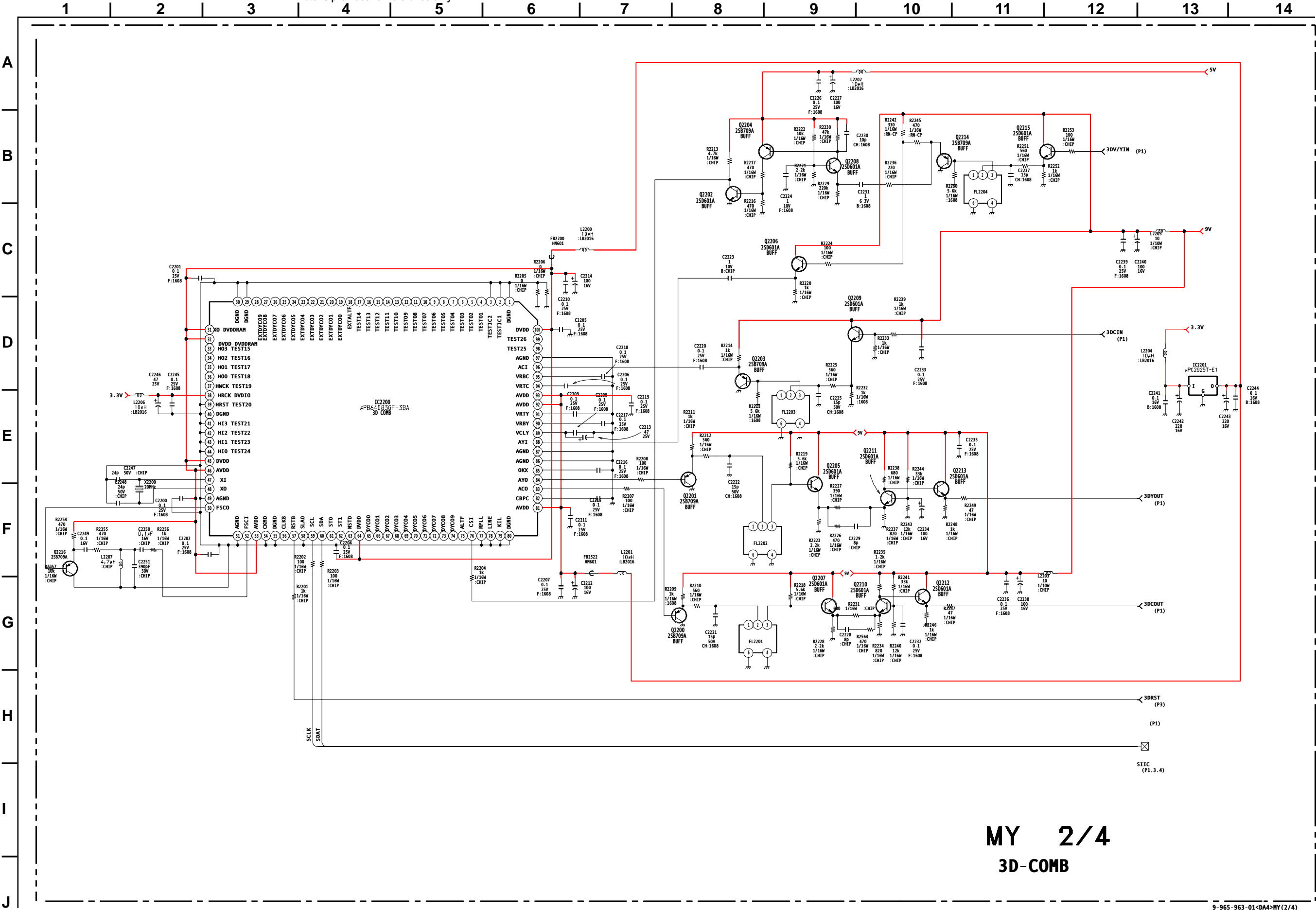




<p>1</p>  <p>1.3 Vp-p (H)</p>	<p>2</p>  <p>1.3 Vp-p (H)</p>
<p>3</p>  <p>1.7 Vp-p (H)</p>	<p>4</p>  <p>2.2 Vp-p (H)</p>
<p>5</p>  <p>1.7 Vp-p (H)</p>	

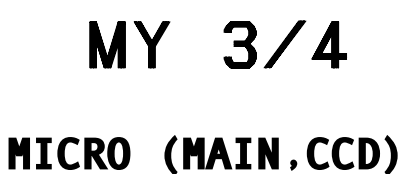
MY BOARD SCHEMATIC DIAGRAM (2 OF 4)

Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.



MY 2/4
3D-COMB

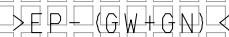
Data is provided for reference only.



Data is provided for reference only.



COMPONENT SIDE

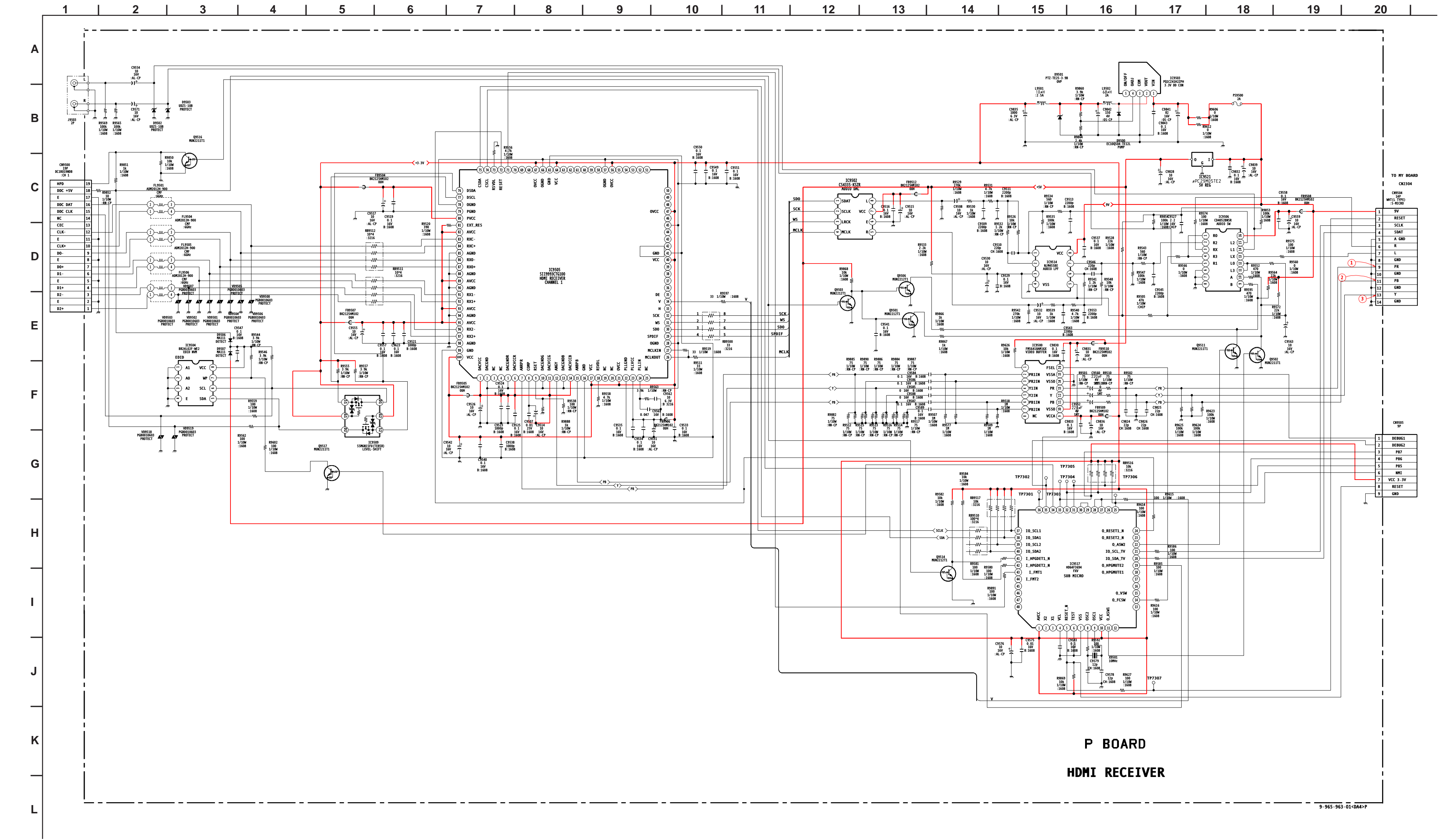




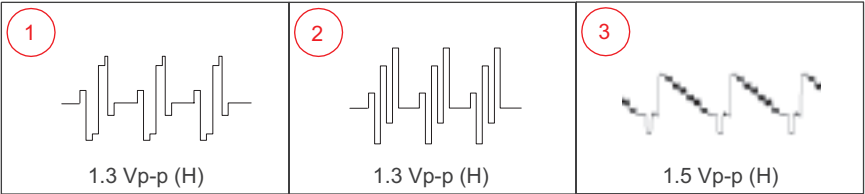
[VIDEO PROCESSOR, 3D-COMB, MICRO (MAIN, CCD), AUDIO PROCESSOR]
CONDUCTOR SIDE



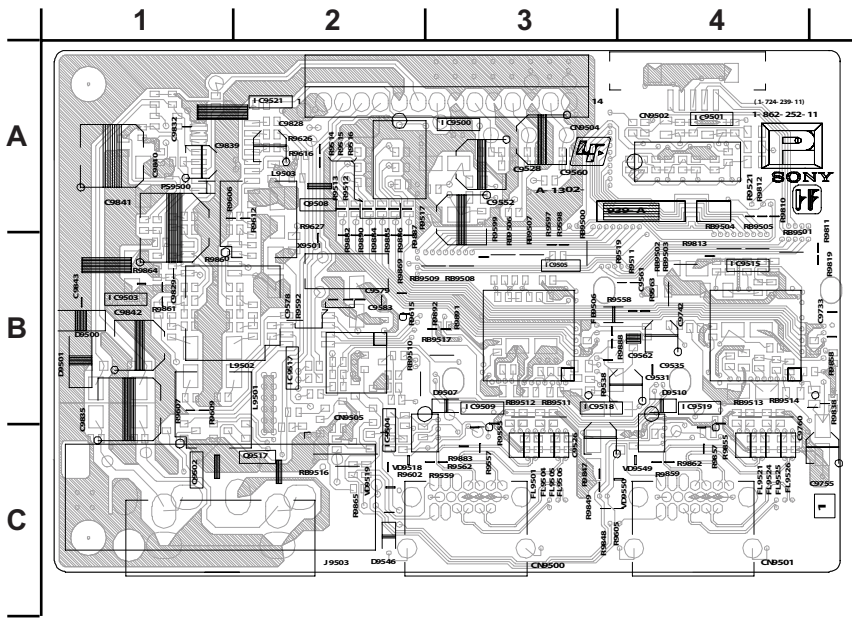
P BOARD SCHEMATIC DIAGRAM Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
The P and PA Boards are interchangeable.
Data is provided for reference only.
Either board can be used as a replacement.



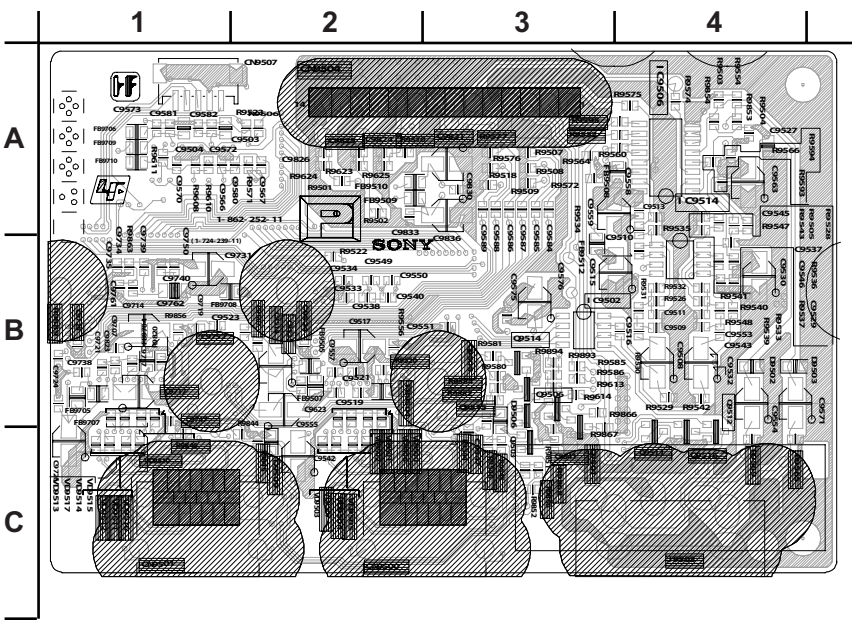
P/PA BOARD WAVEFORMS



[HDMI RECEIVER] COMPONENT SIDE

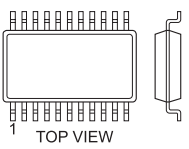
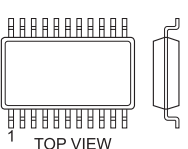
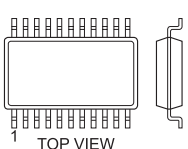
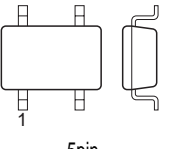
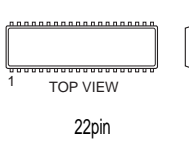
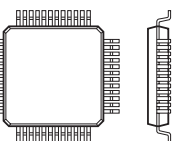
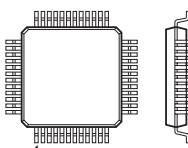
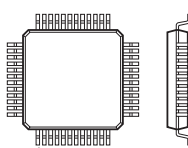
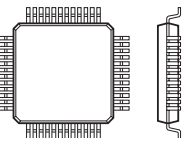
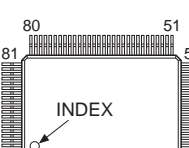
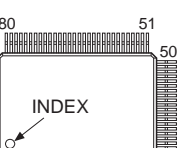
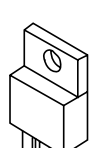
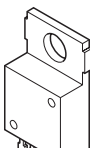
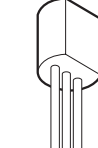
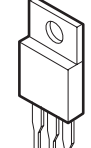
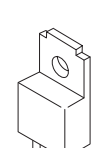
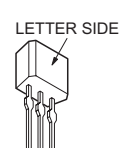
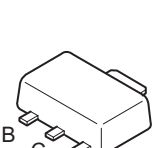
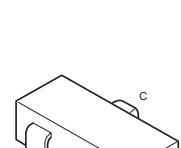
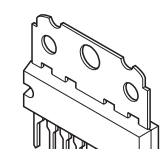
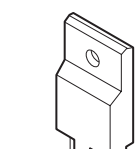
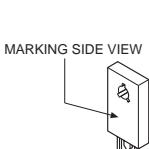
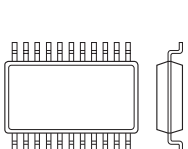


[HDMI RECEIVER] CONDUCTOR SIDE

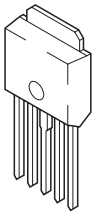
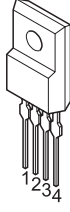
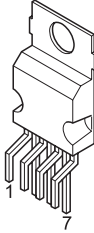
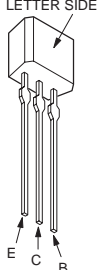
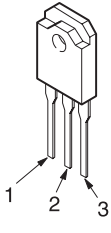
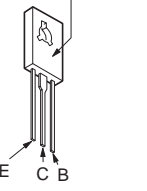
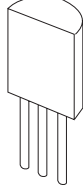
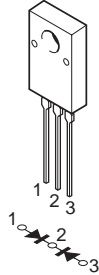
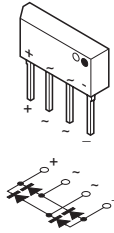
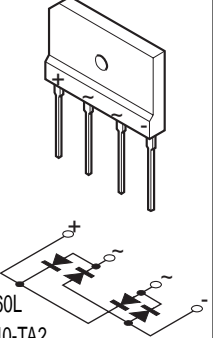
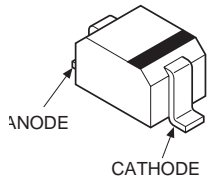
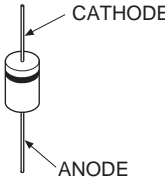
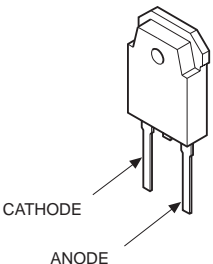
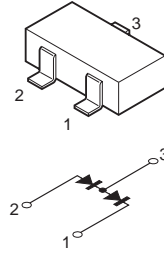
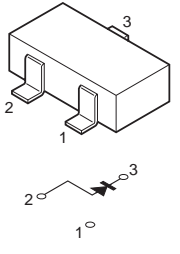
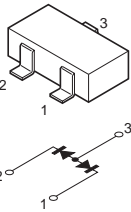
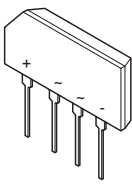
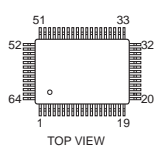
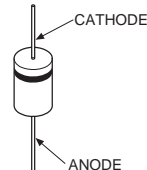
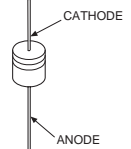


KV-27HS420/29DRC420/30HS420/32HS420/34HS420/36HS420

5-5.SEMICONDUCTORS (1 OF 2)

 <p>14pin</p> <p>M52055FP TLC2932IPW TLC2933IPWR-12</p>	 <p>16pin</p> <p>CXD2085M-T4 SN74LV4053ANSR</p>	 <p>32pin</p> <p>BH3868AFS-E2</p>	 <p>5pin</p> <p>PST9120NL PST9145NL TC7SET08FU(TE85L)</p>	 <p>22pin</p> <p>CXA2026AS</p>
 <p>32pin</p> <p>CXD2073Q-T4</p>	 <p>48pin</p> <p>CXA2103Q CXA2150Q</p>	 <p>64pin</p> <p>TLC5733AIPM</p>	 <p>240pin</p> <p>CXD9509AQ</p>	 <p>CXA2151Q</p>
 <p>M306V2ME-153FP</p>	 <p>NJM79M12FA</p>	 <p>LA6500-FA</p>	 <p>2SA1208S-TP 2SA1091O-TPE</p>	 <p>IRF614 IRFI644-G-LF36 IRFI9630GS</p>
 <p>2SA2005 2SC5511</p>	 <p>2SC3311A-QRSTA</p>	 <p>2SK2036(TE85L)</p>	 <p>DTA114EKA-T146 DTC114TKA-T146 DTC144EKA-T146 2SA1226 2SD601A-QRS-TX 2SB709A-QRS-TX 2SC2412K-T-146-QR 2SD2114KT146</p>	
 <p>TDA6111Q/N4</p>	 <p>2SC4632LS-CB7</p>	 <p>D5LC20U</p>	 <p>NJM2901M-TE2 NJM2903M-TE2 NJM2904M-TE2 NJM4558E(TE2) TC7WU04FU(TE12R)</p>	

SEMICONDUCTORS (2 OF 2)

 <p>PQ07VZ012P</p>	 <p>PQ09RD21 PQ05RF21 PQ12RF21 PQ30RV21</p>	 <p>STV9379</p>	 <p>LETTER SIDE E C B 2SA1776TV2Q 2SA1309A-QRSTA</p>	 <p>2SC3997S-SONY</p>
 <p>LETTER SIDE E C B 2SC2688-LK 2SC3840K</p>	 <p>UPC1093J</p>	 <p>D5SC4M D8LC40F</p>	 <p>S1VB20</p>	 <p>D6SB60L D1NL40-TA2</p>
 <p>ANODE CATHODE MA111-TX MA113-TX UDZSTE-1710B UDZSTE-176.8B UDZSTE-17-12</p>	 <p>CATHODE ANODE 1SS133T-77 D1NL20U-TR ERC91-02E</p>	 <p>CATHODE ANODE PG124S15</p>	 <p>MA153-TX</p>	 <p>MA3091-TX</p>
 <p>DAN202K-T-146</p>	 <p>D4SBS6-F</p>	 <p>TOP VIEW CXA2069Q CXP85840A-039Q</p>	 <p>CATHODE ANODE D1NL20U-TA2 ERA22-08TP3 ERC04-06SE GP08DPKG23 HSS83TD HZU11B1TRF RGP02-20EL-6394 MTZJ-77-22B</p>	
			 <p>CATHODE ANODE D1NS4-TA2 MTZJ-T-77-15 MTZJ-T-77-15B MTZJ-T-77-33B MTZJ-T-77-10 MTZJ-T-77-12 MTZJ-T-77-13C MTZJ-T-77-2.0A MTZJ-T-77-22 MTZJ-T-77-3.0B</p>	

SECTION 6: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

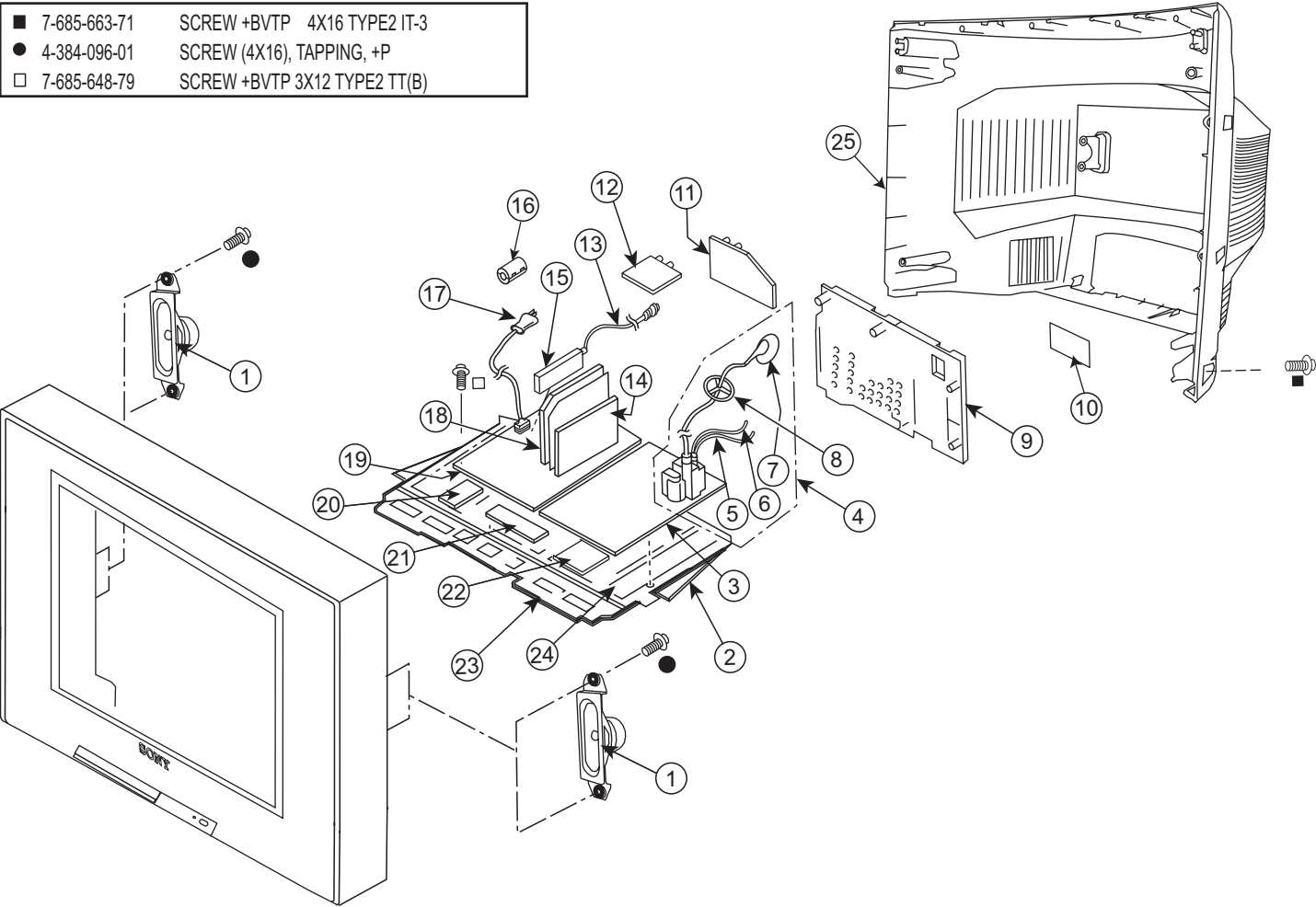
* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-1.CHASSIS (KV-27HS420/29DRC420)

- 7-685-663-71 SCREW +BVTP 4X16 TYPE2 IT-3
- 4-384-096-01 SCREW (4X16), TAPPING, +P
- 7-685-648-79 SCREW +BVTP 3X12 TYPE2 TT(B)



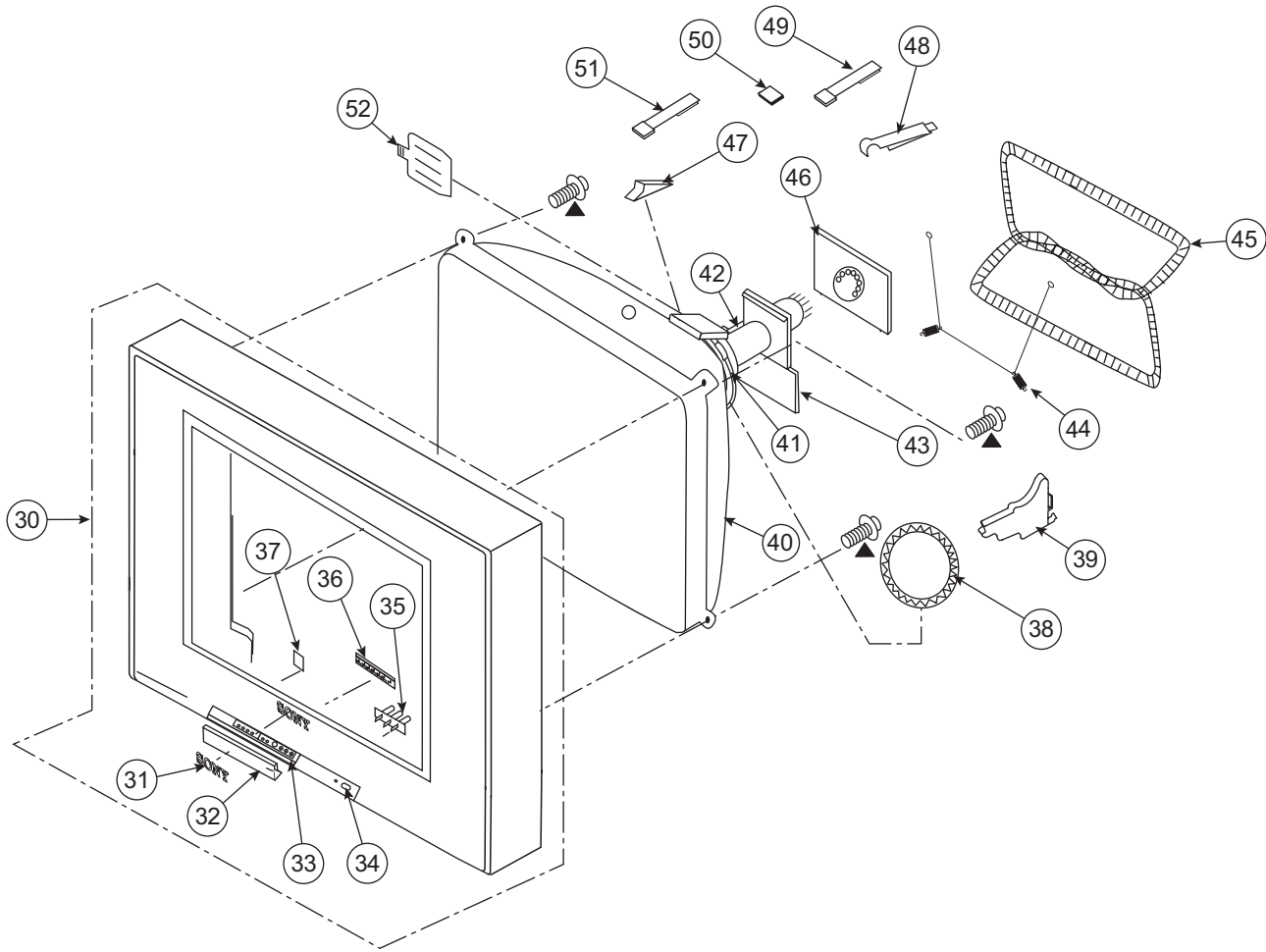
REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION
1	1-825-840-11	LOUDSPEAKER		⚠ 13	1-829-088-11	P-F CABLE
* 2	4-102-133-01	BOARD, BOTTOM		* 14	A-1302-940-A	BY BOARD, COMPLETE
* 3	A-1302-933-A	DZ BOARD, COMPLETE (KV-27HS420/29DRC420 L. NORTH) The high-voltage leads associated with the FBT on this DZ Board are not included and must be ordered separately (SEE 5-7).		⚠ 15	8-598-593-40	TUNER, FSS BTF-WA421
				16	1-500-586-11	FILTER, CLAMP (FERRITE CORE)
				⚠ 17	1-769-837-11	CORD, POWER(WITH NOISE FILTER) (ALL EXCEPT KV-29DRC420 L. SOUTH)
* 3	A-1303-009-A	DZ BOARD, COMPLETE (KV-29DRC420 L. SOUTH) The high-voltage leads associated with the FBT on this DZ Board are not included and must be ordered separately (SEE 5-7).		⚠ 17	1-769-796-62	CORD, POWER (WITH CONNECTOR) (KV-29DRC420 L. SOUTH)
⚠ 4	1-453-464-11	FBT ASSY, NX-6200//X4J4	[5-7]	* 18	A-1302-937-A	MY BOARD, COMPLETE
⚠ 5	1-900-808-42	WIRE ASSY, G2		* 19	A-1302-932-A	AY BOARD, COMPLETE (KV-27HS420/29DRC420 L. NORTH)
⚠ 6	1-900-805-19	WIRE ASSY, FOCUS HV		* 19	A-1303-008-A	AY BOARD, COMPLETE (KV-29DRC420 L. SOUTH)
⚠ 7	1-251-374-14	CAP ASSY, HIGH-VOLTAGE		* 20	A-1302-942-A	HBY BOARD, COMPLETE
8	4-084-918-01	HOLDER, HV CABLE		* 21	A-1405-292-A	HAX BOARD, MOUNTED
* 9	4-102-135-01	BRACKET, U		* 22	A-1302-943-A	HCX BOARD, COMPLETE
10	4-102-764-01	LABEL, TERMINAL		* 23	4-102-120-01	BRACKET, H(27)
* 11	A-1302-938-A	UY BOARD, COMPLETE		* 24	4-095-271-11	BRACKET, MAIN
* 12	A-1302-939-A	P BOARD, COMPLETE		25	4-102-118-01	COVER, REAR
* 12	A-1085-903-A	PA BOARD, COMPLETE				
The P and PA Boards are interchangeable. Either board can be used as a replacement.						

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-2.PICTURE TUBE (KV-27HS420/29DRC420)

▲ 4-046-765-12 SCREW, TAPPING 7+CROWN WASHER



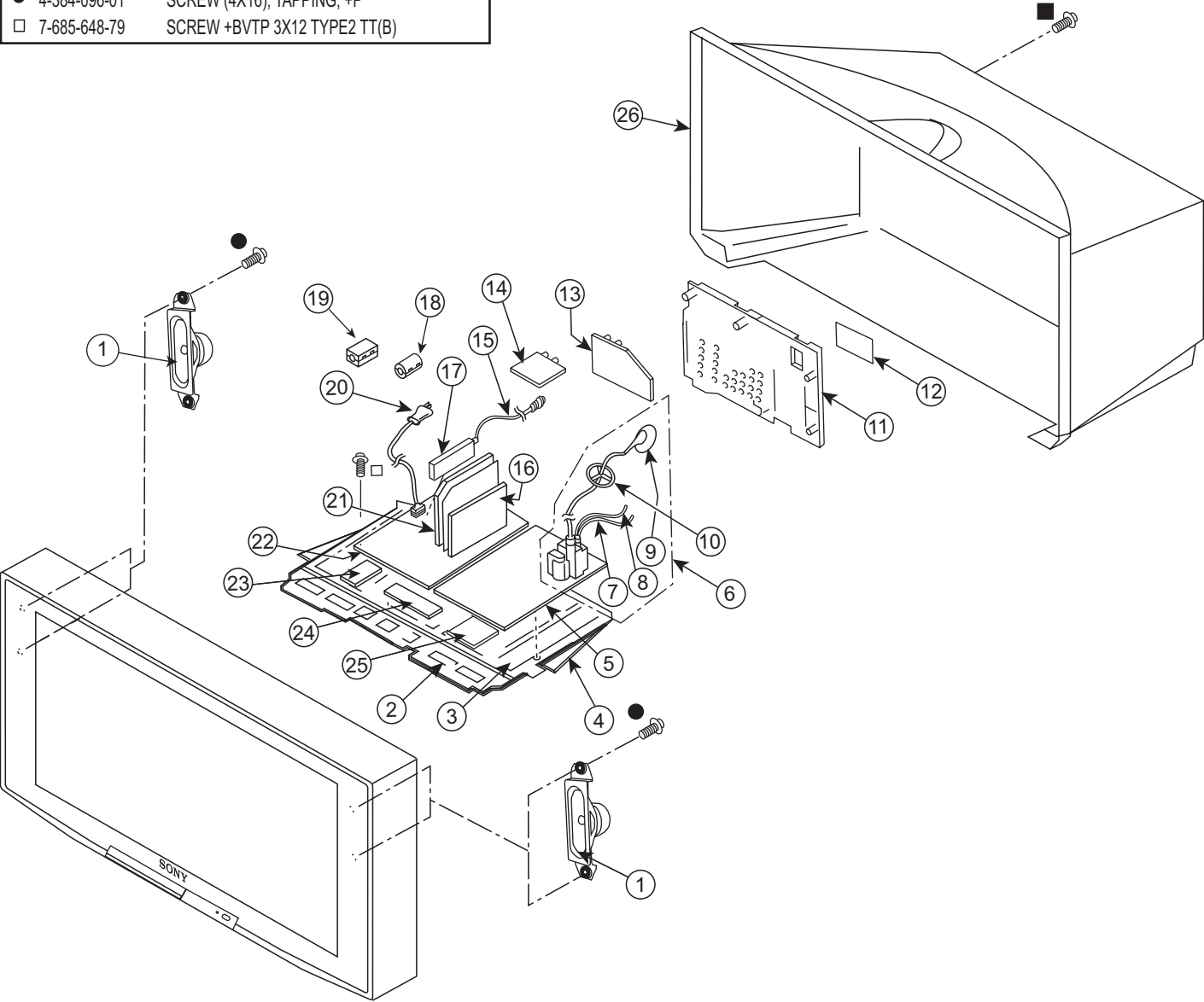
REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION
30	X-4042-952-1	BEZNET ASSY	[31-37]	⚠ 42	8-453-022-21	NECK ASSEMBLY2920-M2
31	3-704-179-61	EMBLEM, SONY (NO.9)		* 43	A-1415-602-A	WY (VAR) BOARD, MOUNTED
32	4-102-127-11	DOOR, CONTROL		44	4-036-329-01	SPRING (B), TENSION
33	4-102-130-01	LABEL, FRONT CONTROL		⚠ 45	1-419-156-21	COIL, DEGAUSSING (KV-27HS420/29DRC420 L. NORTH)
34	4-102-129-11	BUTTON, POWER		⚠ 45	1-419-523-21	COIL, DEGAUSSING (KV-29DRC420 L. SOUTH)
35	4-102-128-01	GUIDE, LED		* 46	A-1400-550-A	CH BOARD, MOUNTED
36	4-093-611-12	BUTTON, MULTI		47	4-053-005-01	SPACER, DY
37	4-102-131-01	DAMPER, DOOR		* 48	4-062-970-12	CLIP (29RSN), DGC
⚠ 38	1-451-498-41	COIL, NA ROTATION		49	4-051-734-21	PIECE B(120), CONV. CORRECT
39	4-102-121-01	SUPPORTER, CRT(27)		50	1-452-885-11	MAGNET, LANDING
⚠ 40	8-735-082-05	CRT 29RSN(SDP) (M68LNH050X) (KV-27HS420/29DRC420 L. NORTH)		51	4-083-414-01	PIECE A(110), CONV CORRECT
⚠ 40	8-735-083-05	CRT 29RSN(SDP)(SOUTH) (M68LNH050X) (KV-29DRC420 L. SOUTH)		52	4-081-170-01	PLATE, TLH CORRECTION
⚠ 41	8-451-511-21	DY Y29RSC2-S				

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-3.CHASSIS (KV-30HS420/34HS420)

- 7-685-663-71
- SCREW +BVTP 4X16 TYPE2 IT-3
-
- 4-384-096-01
- SCREW (4X16), TAPPING, +P
-
- 7-685-648-79
- SCREW +BVTP 3X12 TYPE2 TT(B)



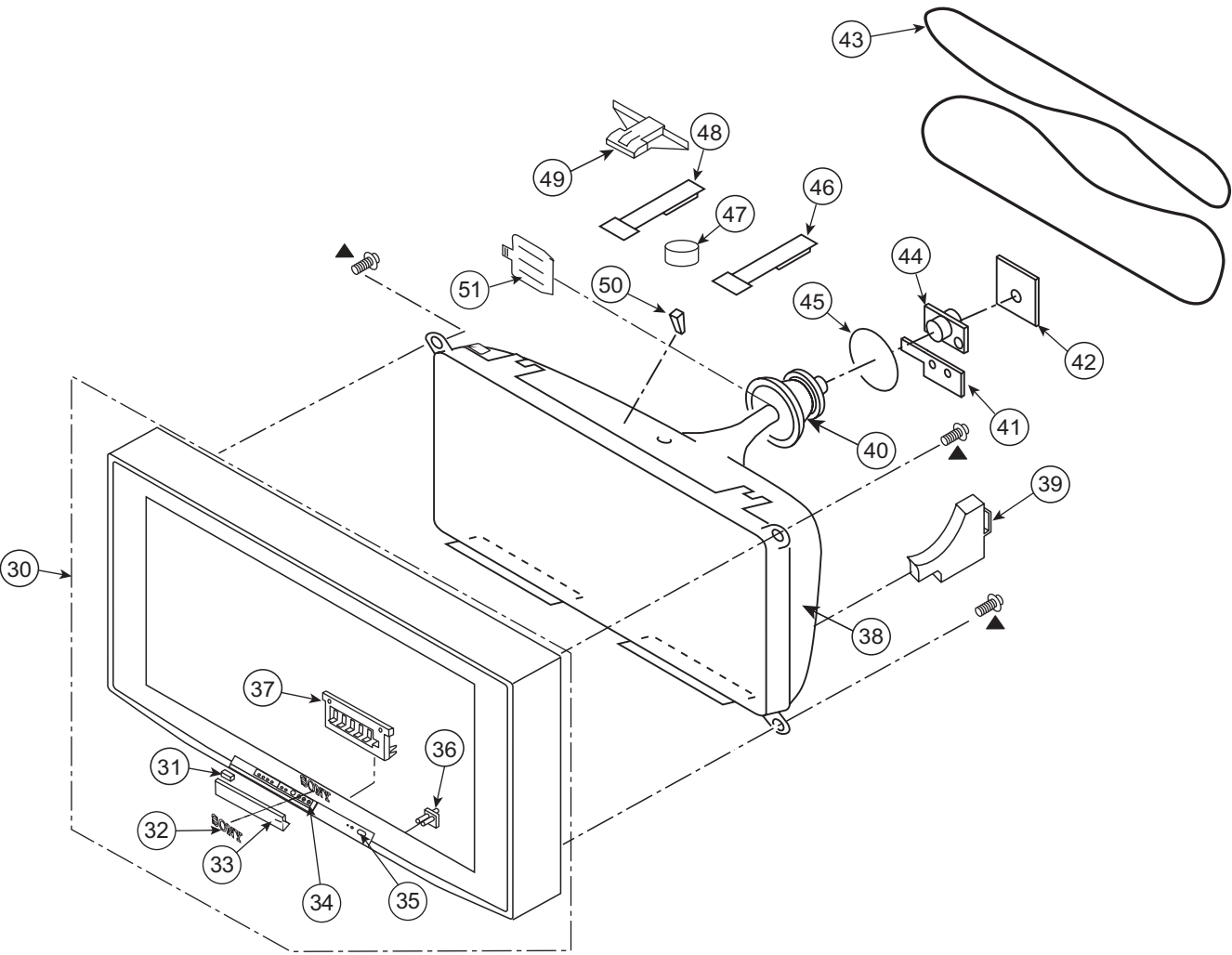
REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION
1	1-825-840-11	LOUDSPEAKER		* 14	A-1302-939-A	P BOARD, COMPLETE
* 2	4-102-134-01	BRACKET, H		* 14	A-1085-903-A	PA BOARD, COMPLETE
* 3	4-095-271-11	BRACKET, MAIN		The P and PA Boards are interchangeable. Either board can be used as a replacement.		
* 4	4-102-133-01	BOARD, BOTTOM		⚠ 15	1-829-088-11	P-F CABLE
* 5	A-1302-934-A	DZ BOARD, COMPLETE (KV-30HS420 ONLY)		* 16	A-1302-940-A	BY BOARD, COMPLETE
		The high-voltage leads associated with the FBT on this DZ Board are not included and must be ordered separately (SEE 7-9).		⚠ 17	8-598-593-40	TUNER, FSS BTF-WA421
* 5	A-1302-936-A	DZ BOARD, COMPLETE (KV-34HS420 ONLY)		18	1-500-586-11	FILTER, CLAMP (FERRITE CORE)
		The high-voltage leads associated with the FBT on this DZ Board are not included and must be ordered separately (SEE 7-9).		19	1-500-082-11	CLAMP, SLEEVE FERRITE
⚠ 6	1-453-464-11	FBT ASSY, NX-6200//X4J4	[7-9]	⚠ 20	1-769-837-11	CORD, POWER(WITH NOISE FILTER)
⚠ 7	1-900-808-42	WIRE ASSY, G2		* 21	A-1302-937-A	MY BOARD, COMPLETE
⚠ 8	1-900-805-19	WIRE ASSY, FOCUS HV		* 22	A-1302-935-A	AY BOARD, COMPLETE (KV-30HS420 ONLY)
⚠ 9	1-251-715-22	CAP ASSY, HIGH-VOLTAGE		* 22	A-1302-941-A	AY BOARD, COMPLETE (KV-34HS420 ONLY)
10	4-084-918-01	HOLDER, HV CABLE		* 23	A-1302-942-A	HBY BOARD, COMPLETE
* 11	4-102-135-01	BRACKET, U		* 24	A-1405-292-A	HAX BOARD, MOUNTED
12	4-102-764-01	LABEL, TERMINAL		* 25	A-1302-943-A	HCX BOARD, COMPLETE
* 13	A-1302-938-A	UY BOARD, COMPLETE		26	4-102-138-01	COVER, REAR (KV-30HS420 ONLY)
				26	4-102-123-01	COVER, REAR (KV-34HS420 ONLY)

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-4.PICTURE TUBE (KV-30HS420/34HS420)

▲ 4-046-765-12 SCREW, TAPPING 7+CROWN WASHER



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION
30	X-4042-956-1	BEZNET ASSY (KV-30HS420 ONLY)	[31-37]	* 42	A-1400-550-A	CH BOARD, MOUNTED
30	X-4042-953-1	BEZNET ASSY (KV-34HS420 ONLY)	[31-37]	⚠ 43	1-456-474-11	DEGAUSSING COIL (KV-30HS420 ONLY)
31	4-102-131-01	DAMPER, DOOR		⚠ 43	1-416-837-21	COIL, DEGAUSSING (KV-34HS420 ONLY)
32	3-704-179-61	EMBLEM, SONY (NO.9)				
33	4-102-127-11	DOOR, CONTROL		⚠ 44	8-453-022-21	NECK ASSEMBLY NA2920-M2 (KV-30HS420 ONLY)
34	4-102-130-01	LABEL, FRONT CONTROL		⚠ 44	8-453-023-21	NECK ASSEMBLY NA328-M2 (KV-34HS420 ONLY)
35	4-102-129-11	BUTTON, POWER		⚠ 45	1-451-498-31	COIL, NA ROTATION
36	4-102-128-01	GUIDE, LED				
37	4-093-611-12	BUTTON, MULTI		46	4-051-734-21	PIECE B(120), CONV. CORRECT
⚠ 38	8-735-110-05	CRT 32RVEN (W76LWN000X) (KV-30HS420 ONLY)		47	1-452-032-00	MAGNET,DISC
⚠ 38	8-735-060-05	CRT 36RV2 (W86LPH015X) (KV-34HS420 ONLY)		48	4-083-414-01	PIECE A(110), CONV CORRECT (KV-34HS420 ONLY)
39	4-102-136-01	SUPPORTER, CRT		49	4-102-284-01	CLIP, DGC
⚠ 40	1-451-551-13	DEFLECTION YOKE (Y32VEC-T) (KV-30HS420 ONLY)		50	4-086-199-02	SPACER, DY (KV-30HS420 ONLY)
⚠ 40	8-451-498-23	DY Y36RVC-M2 (KV-34HS420 ONLY)		50	4-053-005-01	SPACER, DY (KV-34HS420 ONLY)
* 41	A-1415-589-A	WY (VAR) BOARD, MOUNTED (KV-30HS420 ONLY)		51	2-163-920-01	PLATE, TLH CORRECTION (KV-30HS420 ONLY)
* 41	A-1415-602-A	WY (VAR) BOARD, MOUNTED (KV-34HS420 ONLY)				

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-5.CHASSIS (KV-32HS420/36HS420)

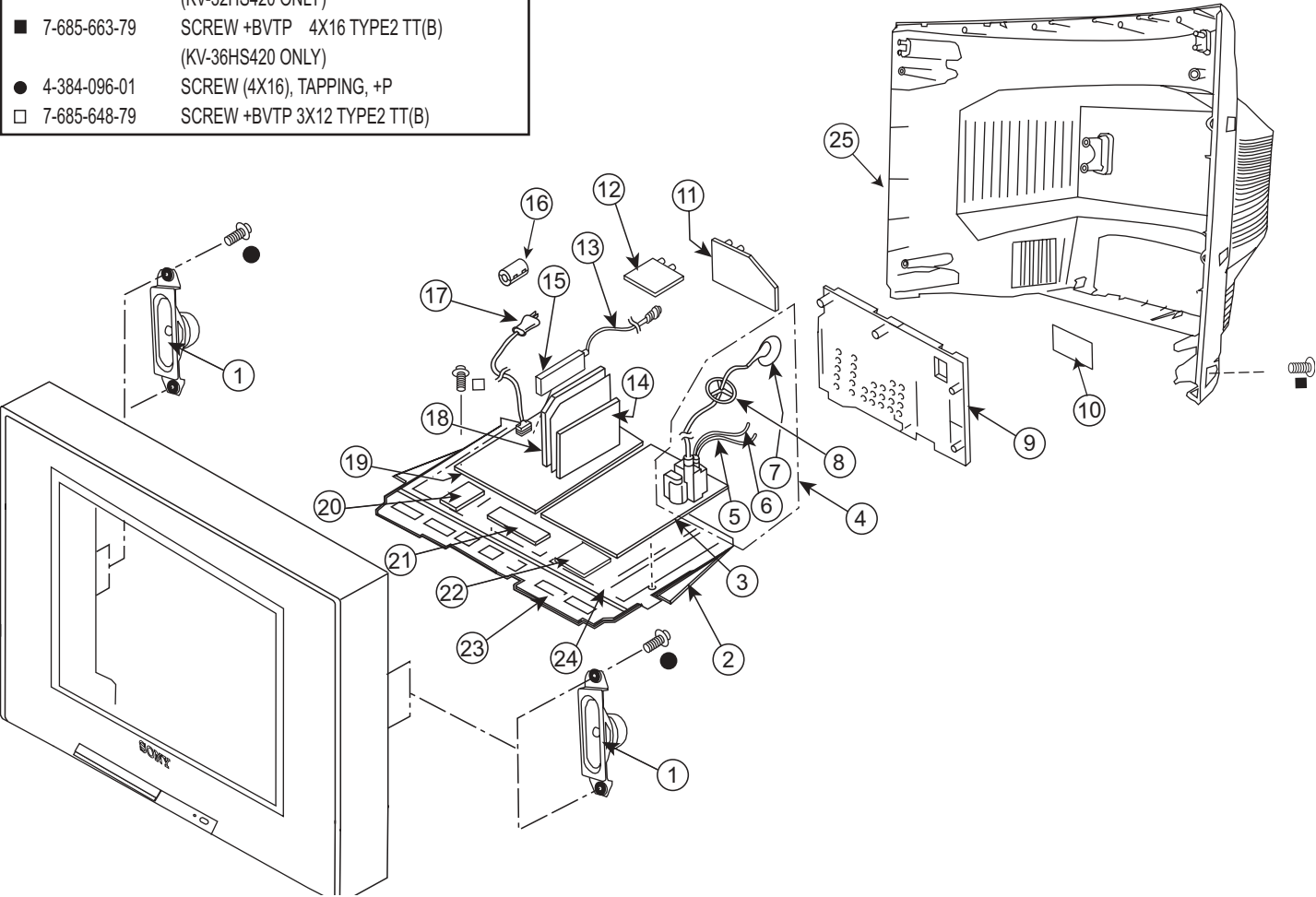
- 7-685-663-71

SCREW +BVTP 4X16 TYPE2 IT-3
(KV-32HS420 ONLY)
- 7-685-663-79

SCREW +BVTP 4X16 TYPE2 TT(B)
(KV-36HS420 ONLY)
- 4-384-096-01

SCREW (4X16), TAPPING, +P
- 7-685-648-79

SCREW +BVTP 3X12 TYPE2 TT(B)



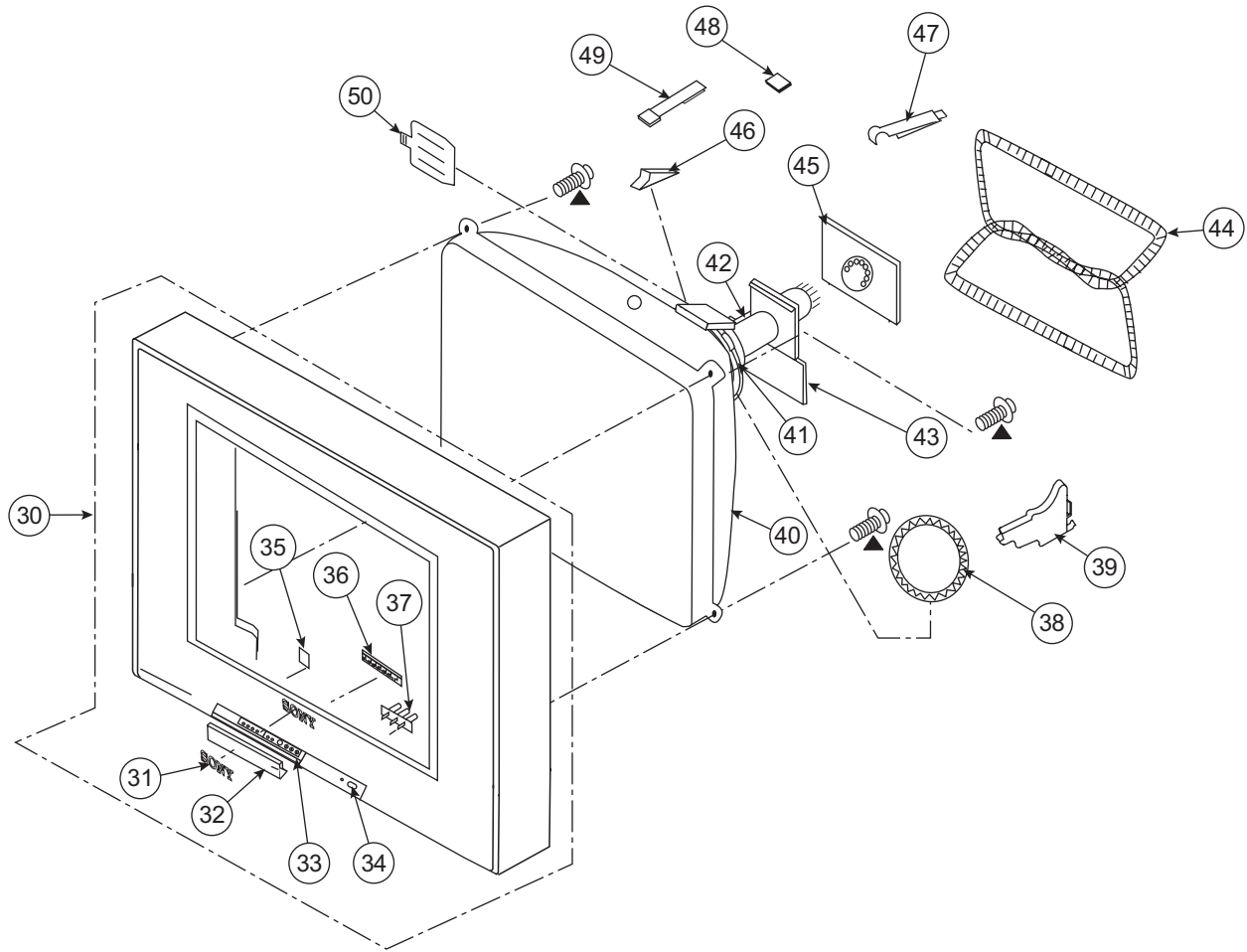
REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION
1	1-825-840-11	LOUDSPEAKER		⚠ 13	1-829-088-11	P-F CABLE
* 2	4-102-133-01	BOARD, BOTTOM		* 14	A-1302-940-A	BY BOARD, COMPLETE
* 3	A-1302-936-A	DZ BOARD, COMPLETE		⚠ 15	8-598-593-40	TUNER, FSS BTF-WA421
		The high-voltage leads associated with the FBT on this DZ Board are not included and must be ordered separately (SEE 5-7).		16	1-500-586-11	FILTER, CLAMP (FERRITE CORE)
⚠ 4	1-453-464-11	FBT ASSY, NX-6200//X4J4	[5-7]	⚠ 17	1-769-837-11	CORD, POWER(WITH NOISE FILTER)
⚠ 5	1-900-808-42	WIRE ASSY, G2		* 18	A-1302-937-A	MY BOARD, COMPLETE
		(KV-32HS420 ONLY)		* 19	A-1302-941-A	AY BOARD, COMPLETE
⚠ 5	1-900-805-22	CONNECTOR ASSY, G2 HV		* 19	A-1073-921-A	AY BOARD, COMPLETE
		(KV-36HS420 ONLY)				(KV-36HS420 ONLY)
⚠ 6	1-900-805-19	WIRE ASSY, FOCUS HV		* 20	A-1302-942-A	HBY BOARD, COMPLETE
⚠ 7	1-251-715-22	CAP ASSY, HIGH-VOLTAGE		* 21	A-1405-292-A	HAX BOARD, MOUNTED
8	4-084-918-01	HOLDER, HV CABLE		* 22	A-1302-943-A	HCX BOARD, COMPLETE
		(KV-32HS420 ONLY)		* 23	4-102-134-01	BRACKET, H
* 9	4-102-135-01	BRACKET, U		* 24	4-095-271-11	BRACKET, MAIN
10	4-102-764-01	LABEL, TERMINAL		25	4-102-132-01	COVER, REAR
* 11	A-1302-938-A	UY BOARD, COMPLETE				(KV-32HS420 ONLY)
				25	4-102-125-01	COVER, REAR
						(KV-36HS420 ONLY)
* 12	A-1302-939-A	P BOARD, COMPLETE				
* 12	A-1085-903-A	PA BOARD, COMPLETE				
		The P and PA Boards are interchangeable.				
		Either board can be used as a replacement.				

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.


6-6.PICTURE TUBE (KV-32HS420/36HS420)


▲ 4-046-765-12 SCREW, TAPPING 7+CROWN WASHER




REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION
30	X-4042-955-1	BEZNET ASSY (KV-32HS420 ONLY)	[31-37]	* 43	A-1415-602-A	WY (VAR) BOARD, MOUNTED
30	X-4042-954-1	BEZNET ASSY (KV-36HS420 ONLY)	[31-35]	⚠ 44	1-416-827-21	COIL, DEGAUSSING (KV-32HS420 ONLY)
31	3-704-179-61	EMBLEM, SONY (NO.9)		⚠ 44	1-456-072-21	COIL, DEGAUSSING (KV-36HS420 ONLY)
32	4-102-127-11	DOOR, CONTROL		* 45	A-1400-550-A	CH BOARD, MOUNTED
33	4-102-130-01	LABEL, FRONT CONTROL		46	4-053-005-01	SPACER, DY (KV-32HS420 ONLY)
34	4-102-129-11	BUTTON, POWER		46	2-164-116-01	SPACER, DY (KV-36HS420 ONLY)
35	4-102-131-01	DAMPER, DOOR		47	4-102-284-01	CLIP, DGC (KV-32HS420 ONLY)
36	4-102-128-01	GUIDE, LED (NOT INCLUDED WITH KV-36HS420 BEZNET ASSY)		47	4-065-895-12	HOLDER, DGC (KV-36HS420 ONLY)
37	4-093-611-12	BUTTON, MULTI (NOT INCLUDED WITH KV-36HS420 BEZNET ASSY)		48	1-452-885-11	MAGNET, LANDING (ALL EXCEPT KV-36HS420)
⚠ 38	1-451-498-41	COIL, NA ROTATION		49	4-083-414-01	PIECE A(110), CONV CORRECT (KV-32HS420 ONLY)
39	4-102-136-01	SUPPORTER, CRT		49	4-085-128-01	PIECE A(110), CONV CORRECT (KV-36HS420 ONLY)
⚠ 40	8-735-047-05	CRT 34RSN (A80LPD80X) (KV-32HS420 ONLY)		50	4-081-170-01	PLATE, TLH CORRECTION
⚠ 40	8-735-048-05	CRT 38RSN (KV-36HS420 ONLY)				
⚠ 41	8-451-512-12	DY Y34RSC-M (KV-32HS420 ONLY)				
⚠ 41	8-451-516-21	DY Y38RSC-V (KV-36HS420 ONLY)				
⚠ 42	8-453-023-21	NECK ASSEMBLY NA328-M2				

SECTION 7: ELECTRICAL PARTS LIST

NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components in this manual identified by the following symbol:  indicate parts that have been carefully factory-selected to satisfy regulations regarding X-ray radiation for each set.

Should replacement be required for one of these components, replace only with the value originally used.






* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.

RESISTORS

- All resistors are in ohms
- F : nonflammable
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

DZ

When ordering parts by reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
DZ				C5012	1-162-968-11	CERAMIC CHIP	0.0047μF 10% 50V
*	A-1302-933-A	DZ BOARD, COMPLETE		C5013	1-162-966-11	CERAMIC CHIP	0.0022μF 10% 50V
	(KV-27HS420, 29DRC420LN ONLY)			C5014	1-164-227-11	CERAMIC CHIP	0.022μF 10% 25V
*	A-1302-934-A	DZ BOARD, COMPLETE		C5016	1-130-783-71	MYLAR	0.33μF 10% 100V
	(KV-30HS420 ONLY)			C5017	1-164-677-11	CERAMIC CHIP	0.033μF 10% 16V
*	A-1302-936-A	DZ BOARD, COMPLETE		C5018	1-162-970-11	CERAMIC CHIP	0.01μF 10% 25V
	(KV-32HS420, 34HS420, 36HS420 ONLY)			C5019	1-126-968-11	ELECT	100μF 20% 50V
*	A-1303-009-A	DZ BOARD, COMPLETE		C5020	1-104-665-11	ELECT	100μF 20% 25V
	(KV-29DRC420LS ONLY)			C5022	1-162-968-11	CERAMIC CHIP	0.0047μF 10% 50V
				C5024	1-102-038-00	CERAMIC	0.001μF 500V
The high-voltage leads associated with the FBT on the DZ board are not included and must be ordered separately. Order the following leads when requesting this DZ Board:				C5028	1-127-715-91	CERAMIC CHIP	0.22μF 10% 16V
	1-251-374-14	CAP ASSY, HIGH-VOLTAGE		(ALL EXCEPT KV-29DRC420LS)			
	1-251-715-22	CAP ASSY, HIGH-VOLTAGE		C5029	1-115-349-51	CERAMIC CHIP	0.01μF 2KV
	(KV-30HS420, 32HS420, 34HS420, 36HS420 ONLY)			(KV-30HS420 ONLY)			
	1-900-805-19	WIRE ASSY, FOCUS HV		C5030	1-137-365-11	MYLAR	0.0015μF 5% 50V
	1-900-805-22	CONNECTOR ASSY, G2 HV		C5031	1-162-965-11	CERAMIC CHIP	0.0015μF 10% 50V
	(KV-36HS420 ONLY)			C5032	1-165-176-11	CERAMIC CHIP	0.047μF 10% 16V
	1-900-808-42	WIRE ASSY, G2		C5033	1-130-495-00	MYLAR	0.1μF 5% 50V
	(ALL EXCEPT KV-36HS420)			C5035	1-104-665-11	ELECT	100μF 20% 25V
				C5036	1-126-941-11	ELECT	470μF 20% 25V
	4-382-854-01	SCREW (M3X8), P, SW (+)		C5039	1-164-227-11	CERAMIC CHIP	0.022μF 10% 25V
	4-382-854-21	SCREW (M3X14), P, SW (+)		(ALL EXCEPT KV-29DRC420LS)			
CAPACITOR				C5040	1-126-935-11	ELECT	470μF 20% 16V
C5001	1-162-966-11	CERAMIC CHIP	0.0022μF 10% 50V	C5041	1-126-935-11	ELECT	470μF 20% 16V
C5002	1-106-383-00	MYLAR	0.047μF 10% 200V	C5044	1-164-360-11	CERAMIC CHIP	0.1μF 16V
C5003	1-162-967-11	CERAMIC CHIP	0.0033μF 10% 50V	C5045	1-164-360-11	CERAMIC CHIP	0.1μF 16V
C5004	1-106-383-00	MYLAR	0.047μF 10% 200V	C5046	1-162-971-11	CERAMIC CHIP	0.001μF 10% 50V
C5005	1-126-235-11	ELECT	100μF 20% 16V	C5047	1-162-971-11	CERAMIC CHIP	0.001μF 10% 50V
C5006	1-126-964-11	ELECT	10μF 20% 50V	C5048	1-162-953-11	CERAMIC CHIP	100pF 5% 50V
C5007	1-126-941-11	ELECT	470μF 20% 25V	C5049	1-162-964-11	CERAMIC CHIP	0.001μF 10% 50V
C5009	1-126-941-11	ELECT	470μF 20% 25V	C5050	1-162-970-11	CERAMIC CHIP	0.01μF 10% 25V
C5010	1-164-227-11	CERAMIC CHIP	0.022μF 10% 25V	C5051	1-164-360-11	CERAMIC CHIP	0.1μF 16V
C5011	1-107-641-11	ELECT	220μF 20% 160V	C5052	1-126-947-11	ELECT	47μF 20% 35V
				C5053	1-106-220-00	MYLAR	0.1μF 10% 100V
				C5054	1-104-666-11	ELECT	220μF 20% 25V




REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C5056	1-162-318-11	CERAMIC	0.001μF	10%	500V	C5511	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C5057	1-104-332-11	CERAMIC	470pF	10%	2KV	C5512	1-162-974-11	CERAMIC CHIP	0.01μF		50V
	(ALL EXCEPT KV-30HS420)					C5513	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C5058	1-162-116-00	CERAMIC	680pF	10%	2KV	C5514	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C5059	1-162-116-00	CERAMIC	680pF	10%	2KV	C5515	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C5060	1-137-417-11	MYLAR	0.015μF	10%	100V						
C5061	1-117-833-21	FILM	5100pF	3%	1.5KV	C5516	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	(KV-30HS420 ONLY)					C5517	1-129-716-00	FILM	0.015μF	5%	400V
C5061	1-117-837-21	FILM	7500pF	3%	1.5KV	C5518	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	(KV-27HS420, 29DRC420LN ONLY)					C5519	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C5061	1-117-839-11	FILM	9100pF	3%	1.5KV		(KV-30HS420 ONLY)				
	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					C5519	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
							(ALL EXCEPT KV-30HS420)				
C5064	1-117-665-11	FILM	0.33μF	5%	250V	C5520	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
	(KV-30HS420 ONLY)					C5521	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C5064	1-117-667-71	FILM	0.47μF	5%	250V	C5522	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V
	(KV-27HS420, 29DRC420LN ONLY)										
C5064	1-117-668-31	FILM	0.56μF	5%	250V	C5523	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					C5524	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
						C5526	1-162-967-11	CERAMIC CHIP	0.0033μF	10%	50V
C5065	1-107-506-11	FILM	0.68μF	3%	400V	C5527	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					C5528	1-129-709-91	FILM	0.0039μF	5%	630V
C5065	1-109-837-11	FILM	0.56μF	3%	400V						
	(KV-27HS420, 29DRC420LN ONLY)					C5529	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C5065	1-117-664-11	FILM	0.27μF	3%	250V	C5530	1-136-167-00	FILM	0.15μF	5%	50V
	(KV-30HS420 ONLY)					C5531	1-130-495-00	MYLAR	0.1μF	5%	50V
						C5533	1-126-961-11	ELECT	2.2μF	20%	50V
C5066	1-109-921-11	CERAMIC	0.0015μF	10%	500V	C5534	1-126-947-11	ELECT	47μF	20%	35V
C5070	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V						
C5071	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C5535	1-126-947-11	ELECT	47μF	20%	35V
C5074	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V	C5540	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C5075	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C5548	1-137-194-81	FILM	0.47μF	5%	50V
						C5550	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C5076	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C5551	1-126-947-11	ELECT	47μF	20%	35V
C5077	1-164-360-11	CERAMIC CHIP	0.1μF		16V						
C5078	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V	C5552	1-126-947-11	ELECT	47μF	20%	35V
C5079	1-162-965-11	CERAMIC CHIP	0.0015μF	10%	50V	C5598	1-126-947-11	ELECT	47μF	20%	35V
C5082	1-117-832-21	FILM	4700pF	3%	1.5KV	C5609	1-104-665-11	ELECT	100μF	20%	25V
	(KV-30HS420 ONLY)					C5623	1-104-665-11	ELECT	100μF	20%	25V
						C6502	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C5082	1-117-837-21	FILM	7500pF	3%	1.5KV						
	(KV-27HS420, 29DRC420LN ONLY)					C6503	1-131-940-11	ELECT	1200μF	20%	250V
C5082	1-117-839-11	FILM	9100pF	3%	1.5KV	C6507	1-130-495-00	MYLAR	0.1μF	5%	50V
	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					C6508	1-126-947-11	ELECT	47μF	20%	35V
C5084	1-126-941-11	ELECT	470μF	20%	25V	C6510	1-130-495-00	MYLAR	0.1μF	5%	50V
						C6511	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C5086	1-126-941-11	ELECT	470μF	20%	25V						
C5502	1-126-941-11	ELECT	470μF	20%	25V	C6513	1-126-940-11	ELECT	330μF	20%	25V
C5504	1-126-947-11	ELECT	47μF	20%	35V	C6514	1-126-767-11	ELECT	1000μF	20%	16V
C5505	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C6515	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C5506	1-162-962-11	CERAMIC CHIP	470pF	10%	50V	C6516	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V




REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C6517	1-126-963-11	ELECT	4.7μF	20%	50V	C8031	1-126-933-11	ELECT	100μF	20%	16V
C6518	1-136-479-11	FILM	0.001μF	5%	100V	C8032	1-136-813-11	FILM	680pF	5%	100V
C6519	1-126-964-11	ELECT	10μF	20%	50V	C8033	1-126-964-11	ELECT	10μF	20%	50V
C6525	1-125-969-91	CERAMIC	680pF	10%	1KV	C8035	1-100-614-81	CERAMIC	330pF	5%	1KV
C6526	1-125-969-91	CERAMIC	680pF	10%	1KV	C8036	1-100-614-81	CERAMIC	330pF	5%	1KV
C6532	1-137-741-22	FILM	39000pF	3%	800V	C8037	1-165-953-11	FILM	47000pF	3%	800V
C6546	1-126-974-11	ELECT	3300μF	20%	50V	C8040	1-126-969-11	ELECT	220μF	20%	50V
C6549	1-126-969-11	ELECT	220μF	20%	50V	C8041	1-130-777-00	MYLAR	0.1μF	5%	100V
C6550	1-126-968-11	ELECT	100μF	20%	50V	C8042	1-136-189-00	MYLAR	0.1μF	10%	250V
C6551	1-164-227-11	CERAMIC CHIP	0.022μF	10%	25V	C8045	1-130-475-00	MYLAR	0.0022μF	5%	50V
C6552	1-126-937-11	ELECT	4700μF	20%	16V	C8046	1-107-444-11	CERAMIC (ALL EXCEPT KV-30HS420)	100pF	5%	2KV
C6554	1-126-768-11	ELECT	2200μF	20%	16V	C8047	1-162-130-11	CERAMIC (ALL EXCEPT KV-30HS420)	180pF	10%	2KV
C6555	1-104-665-11	ELECT	100μF	20%	25V	C8048	1-137-378-11	MYLAR	0.22μF	5%	50V
C6556	1-131-867-51	ELECT	100μF		160V	C8050	1-100-122-31	FILM (ALL EXCEPT KV-29DRC420LS)	0.022μF	5%	400V
C6557	1-107-654-11	ELECT	33μF	20%	250V	C8050	1-129-718-00	FILM (KV-29DRC420LS ONLY)	0.022μF	5%	630V
C6558	1-126-967-11	ELECT	47μF	20%	50V	C8051	1-126-964-11	ELECT	10μF	20%	50V
C6559	1-126-942-61	ELECT	1000μF	20%	25V	C8052	1-104-665-11	ELECT	100μF	20%	25V
C6584	1-165-528-31	MYLAR	0.1μF	10	0V	C8053	1-162-117-00	CERAMIC	100pF	10%	500V
C6590	1-131-940-11	ELECT	1200μF	20%	250V	C8054	1-102-244-00	CERAMIC	220pF	10%	500V
C6592	1-119-898-51	CERAMIC	470pF	10%	250V	C8055	1-100-144-31	FILM (KV-30HS420 ONLY)	0.0068μF	5%	630V
C6593	1-126-768-11	ELECT	2200μF	20%	16V	C8055	1-136-535-91	FILM (ALL EXCEPT KV-30HS420)	0.0018μF	5%	630V
C6595	1-104-666-11	ELECT	220μF	20%	25V	C8056	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C6596	1-126-960-11	ELECT	1μF	20%	50V	C8058	1-137-194-81	FILM	0.47μF	5%	50V
C6597	1-126-943-11	ELECT	2200μF	20%	25V	C8059	1-126-947-11	ELECT	47μF	20%	35V
C8001	1-126-964-11	ELECT	10μF	20%	50V	C8060	1-106-371-00	ELECT (KV-30HS420 ONLY)	0.015μF		200V
C8002	1-126-964-11	ELECT	10μF	20%	50V	C8060	1-107-635-11	ELECT (ALL EXCEPT KV-30HS420)	4.7μF	20%	160V
C8003	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C8063	1-165-607-91	FILM	10000pF	3%	800V
C8005	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C8065	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V
C8006	1-126-960-11	ELECT	1μF	20%	50V	C8073	1-162-962-11	CERAMIC CHIP	470pF	10%	50V
C8007	1-162-971-11	CERAMIC CHIP	0.001μF	10%	50V	C8074	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8012	1-126-947-11	ELECT	47μF	20%	35V	C8075	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8015	1-126-947-11	ELECT	47μF	20%	35V	C8076	1-126-963-11	ELECT	4.7μF	20%	50V
C8016	1-130-495-00	MYLAR	0.1μF	5%	50V	C8077	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C8017	1-126-964-11	ELECT	10μF	20%	50V	C8079	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V
C8018	1-126-964-11	ELECT	10μF	20%	50V	C8139	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C8020	1-130-495-00	MYLAR	0.1μF	5%	50V						
C8021	1-162-974-11	CERAMIC CHIP	0.01μF		50V						
C8024	1-126-967-11	ELECT	47μF	20%	50V						
C8025	1-126-947-11	ELECT	47μF	20%	35V						
C8027	1-130-495-00	MYLAR	0.1μF	5%	50V						
C8028	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V						
C8030	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V						





REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
<u>CONNECTOR</u>				D5508	8-719-404-50	DIODE	MA111-TX
*	CN5001	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	D5511	8-719-062-51	DIODE	1PS226-115
*	CN5002	1-580-798-11	CONNECTOR PIN (DY) 6P	D5512	8-719-062-51	DIODE	1PS226-115
*	CN5003	1-564-507-11	PLUG, CONNECTOR 4P	D5513	8-719-404-50	DIODE	MA111-TX
*	CN5009	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	D5514	8-719-060-90	DIODE	S2L60F
*	CN5011	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	D5515	8-719-404-50	DIODE	MA111-TX
*	CN5509	1-564-512-11	PLUG, CONNECTOR 9P	D6502	8-719-979-64	DIODE	UF4005PKG23
		(KV-29DRC420LS ONLY)		D6504	8-719-075-66	DIODE	D5LC20U-4012
*	CN5509	1-564-515-11	PLUG, CONNECTOR 12P	D6505	8-719-404-50	DIODE	MA111-TX
		(ALL EXCEPT KV-29DRC420LS)		D6508	8-719-982-27	DIODE	MTZJ-33C
*	CN6502	1-766-240-11	PIN, CONNECTOR (PC BOARD) 2P	D6509	8-719-068-00	DIODE	ERC04-06SE
					(ALL EXCEPT KV-29DRC420LS)		
*	CN6503	1-564-508-11	PLUG, CONNECTOR 5P	D6510	8-719-068-00	DIODE	ERC04-06SE
*	CN6504	1-564-515-11	PLUG, CONNECTOR 12P		(ALL EXCEPT KV-29DRC420LS)		
*	CN6506	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	D6513	8-719-510-12	DIODE	D10SC4M
<u>DIODE</u>				D6514	8-719-060-89	DIODE	D4SBS6-F
D5001	8-719-083-60	DIODE	UDZSTE-174.7B	D6516	8-719-075-66	DIODE	D5LC20U-4012
D5002	8-719-908-03	DIODE	GP08D	D6518	8-719-052-90	DIODE	D1NL40-TA2
D5003	8-719-028-45	DIODE	D2L20U	D6519	8-719-063-74	DIODE	D1NL20U-TR2
D5004	8-719-083-82	DIODE	UDZS-TE17-12B	D6520	8-719-063-74	DIODE	D1NL20U-TR2
D5005	8-719-404-50	DIODE	MA111-TX	D6521	8-719-404-50	DIODE	MA111-TX
D5006	8-719-404-50	DIODE	MA111-TX	D6523	8-719-060-89	DIODE	D4SBS6-F
D5007	8-719-404-50	DIODE	MA111-TX	D6524	8-719-062-40	DIODE	D4SBL20μF3
D5008	8-719-404-50	DIODE	MA111-TX	D6525	8-719-982-27	DIODE	MTZJ-33C
D5010	8-719-404-50	DIODE	MA111-TX	D6530	8-719-510-53	DIODE	D4SB60L
D5011	8-719-109-63	DIODE	RD3.0ESB2	D6532	8-719-948-45	DIODE	ERA22-08
D5014	8-719-075-66	DIODE	D5LC20U-4012	D6533	8-719-404-50	DIODE	MA111-TX
D5016	8-719-028-45	DIODE	D2L20U	D6534	8-719-404-50	DIODE	MA111-TX
D5017	8-719-028-45	DIODE	D2L20U	D6537	8-719-404-50	DIODE	MA111-TX
D5018	8-719-083-83	DIODE	UDZS-TE17-15B	D6538	8-719-109-85	DIODE	RD5.1ESB2
D5019	8-719-404-50	DIODE	MA111-TX	D8001	8-719-404-50	DIODE	MA111-TX
D5023	8-719-061-21	DIODE	FMQ-G5FMS	D8003	8-719-404-50	DIODE	MA111-TX
D5027	8-719-404-50	DIODE	MA111-TX	D8005	8-719-404-50	DIODE	MA111-TX
D5028	8-719-404-50	DIODE	MA111-TX	D8006	8-719-063-74	DIODE	D1NL20U-TR2
D5032	8-719-404-50	DIODE	MA111-TX	D8007	8-719-404-50	DIODE	MA111-TX
D5035	8-719-302-43	DIODE	EL1Z	D8009	8-719-083-83	DIODE	UDZS-TE17-15B
D5036	8-719-302-43	DIODE	EL1Z	D8010	8-719-979-64	DIODE	UF4005PKG23
D5501	8-719-404-50	DIODE	MA111-TX	D8011	8-719-110-41	DIODE	RD15ESB2
D5502	8-719-404-50	DIODE	MA111-TX	D8012	8-719-110-41	DIODE	RD15ESB2
D5504	8-719-404-50	DIODE	MA111-TX	D8013	8-719-083-83	DIODE	UDZS-TE17-15B
D5506	8-719-404-50	DIODE	MA111-TX	D8014	8-719-083-83	DIODE	UDZS-TE17-15B
				D8015	8-719-404-50	DIODE	MA111-TX
				D8016	8-719-948-45	DIODE	ERA22-08
				D8017	8-719-948-45	DIODE	ERA22-08

NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
D8018	8-719-948-45	DIODE	ERA22-08	IC8002	6-705-810-01	IC	MCZ3001DB
D8022	8-719-063-74	DIODE	D1NL20U-TR2	IC8004	8-759-701-01	IC	NJM2904M
D8023	8-719-109-85	DIODE	RD5.1ESB2	 IC8005	6-706-127-01	IC	TL1431ACZ-AP
D8024	8-719-109-85	DIODE	RD5.1ESB2	IC8006	8-759-700-07	IC	NJM2903M
D8026	8-719-404-50	DIODE	MA111-TX	 IC8104	6-706-127-01	IC	TL1431ACZ-AP
D8028	8-719-069-54	DIODE	UDZSTE-175.1B	CHIP CONDUCTOR			
D8030	8-719-083-66	DIODE	UDZSTE-1718B	JR5000	1-216-864-11	SHORT CHIP	
D8034	8-719-921-63	DIODE	MTZJ-7.5B	JR5001	1-216-864-11	SHORT CHIP	
D8140	8-719-404-50	DIODE	MA111-TX	JR5002	1-216-864-11	SHORT CHIP	
FERRITE BEAD				JR5003	1-216-864-11	SHORT CHIP	
FB5001	1-410-397-21	FERRITE	1.1μH	JR5004	1-216-864-11	SHORT CHIP	
FB5002	1-543-298-11	FERRITE	0μH	JR5005	1-216-864-11	SHORT CHIP	
FB5003	1-410-397-21	FERRITE	1.1μH	JR5006	1-216-864-11	SHORT CHIP	
FB6501	1-410-397-21	FERRITE	1.1μH	JR5007	1-216-864-11	SHORT CHIP	
FB6508	1-410-396-41	FERRITE	0.45μH	JR5008	1-216-864-11	SHORT CHIP	
FB6509	1-410-396-41	FERRITE	0.45μH	JR5009	1-216-864-11	SHORT CHIP	
FB6519	1-410-397-21	FERRITE	1.1μH	JR5010	1-216-864-11	SHORT CHIP	
FB6520	1-412-911-11	FERRITE	0μH	JR5011	1-216-864-11	SHORT CHIP	
FB6521	1-412-911-11	FERRITE	0μH	JR5012	1-216-864-11	SHORT CHIP	
FB8001	1-412-911-11	FERRITE	0μH	JR5013	1-216-864-11	SHORT CHIP	
FB8002	1-412-911-11	FERRITE	0μH	JR5014	1-216-864-11	SHORT CHIP	
IC				JR5015	1-216-864-11	SHORT CHIP	
IC5001	8-759-701-01	IC	NJM2904M	JR5016	1-216-864-11	SHORT CHIP	
IC5002	8-759-700-07	IC	NJM2903M	JR5065	1-216-864-11	SHORT CHIP	
IC5003	8-759-701-01	IC	NJM2904M	JR5501	1-216-864-11	SHORT CHIP	
	(ALL EXCEPT KV-29DRC420LS)			JR5504	1-216-864-11	SHORT CHIP	
IC5004	8-759-696-71	IC	STV9379A	JR5505	1-216-864-11	SHORT CHIP	
IC5005	8-759-803-42	IC	LA6500-FA	JR8000	1-216-864-11	SHORT CHIP	
IC5006	8-749-013-76	IC	PQ6RD83B	JR8001	1-216-864-11	SHORT CHIP	
IC5007	8-759-981-61	IC	LM2901M	JR8002	1-216-864-11	SHORT CHIP	
IC5502	8-759-981-61	IC	LM2901M	JR8003	1-216-864-11	SHORT CHIP	
IC5504	8-759-803-42	IC	LA6500-FA	JR8005	1-216-864-11	SHORT CHIP	
IC5506	8-759-803-42	IC	LA6500-FA	JR8006	1-216-864-11	SHORT CHIP	
IC5511	8-759-701-01	IC	NJM2904M	JR8007	1-216-864-11	SHORT CHIP	
IC5512	8-759-929-65	IC	LM7912CT	JR8022	1-216-864-11	SHORT CHIP	
IC5515	8-759-701-01	IC	NJM2904M	JR8023	1-216-864-11	SHORT CHIP	
IC6501	6-705-810-01	IC	MCZ3001DB	JR8052	1-216-864-11	SHORT CHIP	
IC6502	6-700-897-01	IC	PQ12RD21	(KV-29DRC420LS ONLY)			
IC6503	8-749-012-13	IC	DM-58	COIL			
IC6505	8-749-921-86	IC	SE-140N	L5001	1-406-665-11	INDUCTOR	100μH
IC8001	8-759-700-07	IC	NJM2903M	L5003	1-406-892-31	INDUCTOR	4MH



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
L5005	1-419-196-11	COIL, HORIZONTAL LINEARITY (KV-27HS420, 29DRC420LN ONLY)		<u>TRANSISTOR</u>			
L5005	1-424-874-11	COIL, HORIZONTAL LINEARITY (KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)		Q5001	8-729-422-27	TRANSISTOR	2SD601A-Q
L5005	1-424-997-11	COIL, HORIZONTAL LINEARITY (KV-30HS420 ONLY)		Q5002	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
				Q5003	8-729-027-97	TRANSISTOR	IRFI9630G-LF
				Q5004	8-729-019-57	TRANSISTOR	2SA1208S-TP
				Q5005	8-729-422-27	TRANSISTOR	2SD601A-Q
L5504	1-406-987-21	INDUCTOR (KV-30HS420 ONLY)	4.7MH	Q5006	8-729-422-27	TRANSISTOR	2SD601A-Q
L5504	1-406-989-21	INDUCTOR (ALL EXCEPT KV-30HS420)	10MH	Q5007	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
L5505	1-406-989-21	INDUCTOR	10MH	Q5008	8-729-422-27	TRANSISTOR	2SD601A-Q
L5506	1-406-987-21	INDUCTOR (KV-30HS420 ONLY)	4.7MH	Q5009	8-729-422-27	TRANSISTOR	2SD601A-Q
L6501	1-412-525-31	INDUCTOR	10μH	Q5010	8-729-422-27	TRANSISTOR	2SD601A-Q
L6502	1-412-525-31	INDUCTOR	10μH	Q5011	8-729-422-27	TRANSISTOR	2SD601A-Q
L6503	1-412-525-31	INDUCTOR	10μH	Q5012	8-729-119-80	TRANSISTOR	2SC2688-LK
L6505	1-406-665-11	INDUCTOR	100μH	Q5013	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
L6506	1-412-525-31	INDUCTOR	10μH	Q5014	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
L6507	1-412-525-31	INDUCTOR	10μH	Q5015	8-729-046-80	TRANSISTOR (ALL EXCEPT KV-29DRC420LS)	2SC4634LS-CB11
L6510	1-412-523-41	INDUCTOR	6.8μH	Q5018	8-729-422-27	TRANSISTOR	2SD601A-Q
L6511	1-412-523-41	INDUCTOR	6.8μH	Q5019	8-729-422-27	TRANSISTOR	2SD601A-Q
L6514	1-412-525-31	INDUCTOR	10μH	Q5020	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
L6517	1-412-521-31	INDUCTOR	4.7μH	Q5021	8-729-422-27	TRANSISTOR	2SD601A-Q
L6518	1-412-521-31	INDUCTOR	4.7μH	Q5022	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
L8002	1-428-950-31	INDUCTOR	125μH	Q5023	8-729-422-27	TRANSISTOR	2SD601A-Q
L8005	1-406-674-11	INDUCTOR (ALL EXCEPT KV-30HS420)	3.3MH	Q5024	8-729-422-27	TRANSISTOR	2SD601A-Q
L8005	1-406-670-11	INDUCTOR (KV-30HS420 ONLY)	680μH	Q5025	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
				Q5026	8-729-422-27	TRANSISTOR	2SD601A-Q
				Q5027	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
				Q5028	8-729-038-83	TRANSISTOR	2SK2251-01-F19
				Q5030	6-550-168-01	TRANSISTOR	2SC5682-RB
				Q5031	6-550-188-01	TRANSISTOR	2SK3579-01MR-F119
				Q5035	8-729-422-27	TRANSISTOR	2SD601A-Q
				Q5036	8-729-422-27	TRANSISTOR	2SD601A-Q
				Q5501	8-729-422-27	TRANSISTOR	2SD601A-Q
				Q5502	8-729-422-27	TRANSISTOR	2SD601A-Q
				Q5503	8-729-422-27	TRANSISTOR	2SD601A-Q
				Q5504	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
				Q5505	8-729-422-27	TRANSISTOR	2SD601A-Q
				Q5506	8-729-422-27	TRANSISTOR	2SD601A-Q
				Q5507	8-729-052-29	TRANSISTOR	2SK2876-01MR-F122
				Q5510	8-729-422-27	TRANSISTOR	2SD601A-Q
				Q5512	8-729-422-27	TRANSISTOR	2SD601A-Q
				Q5513	8-729-422-27	TRANSISTOR	2SD601A-Q
<u>PHOTO COUPLER</u>							
PH6501	8-749-016-81	PHOTO COUPLER	PC123Y22				
PH6502	8-749-016-81	PHOTO COUPLER	PC123Y22				
PH8001	8-749-016-81	PHOTO COUPLER	PC123Y22				
PH8003	8-749-016-81	PHOTO COUPLER	PC123Y22				
PH8004	8-749-016-81	PHOTO COUPLER	PC123Y22				
<u>IC LINK</u>							
PS6505	1-576-288-41	IC LINK	10A 90V				
PS6506	1-576-288-41	IC LINK	10A 90V				
PS6550	1-576-288-41	IC LINK (ALL EXCEPT KV-29DRC420LS)	10A 90V				




REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
Q5568	8-729-422-27	TRANSISTOR	2SD601A-Q			R5014	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
Q5569	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX				(ALL EXCEPT KV-30HS420)				
Q6506	8-729-052-32	TRANSISTOR	IRFIB7N50A-LF31			R5014	1-218-698-11	METAL CHIP	1.8K	0.5%	1/10W
Q6507	8-729-052-32	TRANSISTOR	IRFIB7N50A-LF31				(KV-30HS420 ONLY)				
Q6522	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R5015	1-216-841-11	METAL CHIP	47K	5%	1/10W
Q6527	8-729-422-27	TRANSISTOR	2SD601A-Q			R5016	1-208-832-11	METAL CHIP	120K	0.50%	1/10W
Q6530	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R5016	(ALL EXCEPT KV-30HS420)				
Q6532	8-729-422-27	TRANSISTOR	2SD601A-Q				1-208-834-11	METAL CHIP	150K	0.5%	1/10W
Q8003	8-729-422-27	TRANSISTOR	2SD601A-Q			R5017	(KV-30HS420 ONLY)				
Q8004	8-729-422-27	TRANSISTOR	2SD601A-Q				1-208-832-11	METAL CHIP	120K	0.50%	1/10W
Q8007	8-729-422-27	TRANSISTOR	2SD601A-Q			R5017	(ALL EXCEPT KV-30HS420)				
Q8008	8-729-422-27	TRANSISTOR	2SD601A-Q				1-208-834-11	METAL CHIP	150K	0.5%	1/10W
Q8011	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R5018	(KV-30HS420 ONLY)				
Q8013	8-729-052-32	TRANSISTOR	IRFIB7N50A-LF31				1-216-833-11	METAL CHIP	10K	5%	1/10W
Q8014	8-729-052-32	TRANSISTOR	IRFIB7N50A-LF31			R5019	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R5020	1-218-710-11	METAL CHIP	5.6K	0.50%	1/10W
Q8015	8-729-119-80	TRANSISTOR	2SC2688-LK			R5023	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q8016	8-729-045-65	TRANSISTOR	2SA1776TV2Q				1-216-833-11	METAL CHIP	10K	5%	1/10W
Q8018	8-729-043-95	TRANSISTOR	2SC3840(3)			R5025	1-218-710-11	METAL CHIP	5.6K	0.50%	1/10W
Q8019	8-729-422-27	TRANSISTOR	2SD601A-Q			R5026	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q8020	8-729-422-27	TRANSISTOR	2SD601A-Q			R5027	1-216-841-11	METAL CHIP	47K	5%	1/10W
Q8021	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R5028	1-216-841-11	METAL CHIP	47K	5%	1/10W
Q8022	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX				1-218-708-11	METAL CHIP	4.7K	0.50%	1/10W
Q8023	8-729-422-27	TRANSISTOR	2SD601A-Q			R5030	1-216-864-11	SHORT CHIP			
Q8028	8-729-422-27	TRANSISTOR	2SD601A-Q			R5031	1-218-692-11	METAL CHIP	1K	0.50%	1/10W
Q8034	8-729-422-27	TRANSISTOR	2SD601A-Q			R5033	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q8035	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX								
						R5035	1-218-720-11	METAL CHIP	15K	0.5%	1/10W
							(KV-30HS420 ONLY)				
						R5036	1-216-839-11	METAL CHIP	33K	5%	1/10W
						R5037	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
						R5038	1-216-834-11	METAL CHIP	12K	5%	1/10W
R5001	1-216-797-11	METAL CHIP	10	5%	1/10W	R5040	1-218-748-11	METAL CHIP	220K	0.50%	1/10W
R5002	1-216-813-11	METAL CHIP	220	5%	1/10W	R5041	1-249-383-11	CARBON	1.5	5%	1/4W
R5003	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5042	1-216-841-11	METAL CHIP	47K	5%	1/10W
R5004	1-208-832-11	METAL CHIP	120K	0.50%	1/10W	R5043	1-218-708-11	METAL CHIP	4.7K	0.50%	1/10W
R5005	1-216-813-11	METAL CHIP	220	5%	1/10W	R5044	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5007	1-208-832-11	METAL CHIP	120K	0.50%	1/10W	R5045	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5008	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5046	1-214-798-21	METAL	1.8	1%	1/2W
R5009	1-208-832-11	METAL CHIP	120K	0.50%	1/10W	R5047	1-249-421-11	CARBON	2.2K	5%	1/4W
R5010	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5048	1-216-841-11	METAL CHIP	47K	5%	1/10W
R5011	1-208-832-11	METAL CHIP	120K	0.50%	1/10W	R5049	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5012	1-218-724-11	METAL CHIP	22K	0.50%	1/10W	R5050	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5013	1-216-373-11	METAL OXIDE	2.2	5%	2W		1-249-414-11	CARBON	560	5%	1/4W
						R5052	1-214-796-00	METAL	1.5	1%	1/2W
R5013	1-216-393-00	METAL OXIDE	2.2	5%	3W						




REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R5053	1-215-890-11	METAL OXIDE (ALL EXCEPT KV-30HS420)	470	5%	2W	R5081	1-218-728-11	METAL CHIP (KV-30HS420 ONLY)	33K	0.5%	1/10W
R5053	1-215-892-11	METAL OXIDE (KV-30HS420 ONLY)	1K	5%	2W	R5081	1-218-740-11	METAL CHIP (ALL EXCEPT KV-30HS420)	100K	0.50%	1/10W
R5054	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5082	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R5060	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5083	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R5061	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5084	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5062	1-216-845-11	METAL CHIP	100K	5%	1/10W	R5085	1-216-853-11	METAL CHIP	470K	5%	1/10W
R5063	1-218-722-11	METAL CHIP (ALL EXCEPT KV-30HS420)	18K	0.50%	1/10W	R5086	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5063	1-218-724-11	METAL CHIP (KV-30HS420 ONLY)	22K	0.50%	1/10W	R5087	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5064	1-218-748-11	METAL CHIP	220K	0.50%	1/10W	R5090	1-216-369-00	METAL OXIDE	1	5%	2W
R5065	1-218-749-11	METAL CHIP (KV-30HS420 ONLY)	240K	0.50%	1/10W	R5091	1-249-389-11	CARBON	4.7	5%	1/4W
R5065	1-218-750-11	METAL CHIP (ALL EXCEPT KV-30HS420)	270K	0.50%	1/10W	R5092	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5066	1-218-746-11	METAL CHIP (ALL EXCEPT KV-30HS420)	180K	0.50%	1/10W	R5093	1-218-717-11	METAL CHIP	11K	0.50%	1/10W
R5066	1-218-748-11	METAL CHIP (KV-30HS420 ONLY)	220K	0.50%	1/10W	R5095	1-249-377-11	CARBON	0.47	5%	1/4W
R5068	1-218-750-11	METAL CHIP (ALL EXCEPT KV-29DRC420LS)	270K	0.50%	1/10W	R5096	1-249-377-11	CARBON	0.47	5%	1/4W
R5069	1-216-841-11	METAL CHIP (ALL EXCEPT KV-29DRC420LS)	47K	5%	1/10W	R5097	1-249-380-11	CARBON	0.82	5%	1/4W
R5070	1-218-710-11	METAL CHIP (ALL EXCEPT KV-29DRC420LS)	5.6K	0.50%	1/10W	R5098	1-249-379-11	CARBON	0.68	5%	1/4W
R5071	1-218-704-11	METAL CHIP (ALL EXCEPT KV-29DRC420LS)	3.3K	0.50%	1/10W	R5101	1-218-708-11	METAL CHIP	4.7K	0.50%	1/10W
R5072	1-216-833-11	METAL CHIP (ALL EXCEPT KV-29DRC420LS)	10K	5%	1/10W	R5102	1-218-692-11	METAL CHIP	1K	0.50%	1/10W
R5073	1-216-833-11	METAL CHIP (ALL EXCEPT KV-29DRC420LS)	10K	5%	1/10W	R5103	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R5074	1-260-328-11	CARBON (ALL EXCEPT KV-29DRC420LS)	1K	5%	1/2W	R5104	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5076	1-215-900-11	METAL OXIDE (ALL EXCEPT KV-29DRC420LS)	22K	5%	2W	R5105	1-216-841-11	METAL CHIP	47K	5%	1/10W
R5077	1-215-900-11	METAL OXIDE (ALL EXCEPT KV-29DRC420LS)	22K	5%	2W	R5106	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5078	1-218-684-11	METAL CHIP (ALL EXCEPT KV-29DRC420LS)	470	0.50%	1/10W	R5107	1-249-393-11	CARBON	10	5%	1/4W
R5079	1-218-720-11	METAL CHIP	15K	0.50%	1/10W	R5108	1-218-736-11	METAL CHIP	68K	0.50%	1/10W
R5080	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R5109	1-218-728-11	METAL CHIP	33K	0.50%	1/10W
						R5110	1-249-401-11	CARBON	47	5%	1/4W
						R5111	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
						R5112	1-216-813-11	METAL CHIP	220	5%	1/10W
						R5113	1-260-107-11	CARBON	4.7K	5%	1/2W
						R5115	1-249-417-11	CARBON	1K	5%	1/4W
						R5116	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
						R5117	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
						R5118	1-216-797-11	METAL CHIP	10	5%	1/10W
						R5120	1-218-702-11	METAL CHIP	2.7K	0.50%	1/10W
						R5124	1-216-809-11	METAL CHIP	100	5%	1/10W
						R5125	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
						R5126	1-216-809-11	METAL CHIP	100	5%	1/10W
						R5127	1-215-890-11	METAL OXIDE (ALL EXCEPT KV-30HS420)	470	5%	2W
						R5127	1-215-892-11	METAL OXIDE (KV-30HS420 ONLY)	1K	5%	2W
						R5128	1-216-828-11	METAL CHIP	3.9K	5%	1/10W





REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R5129	1-216-809-11	METAL CHIP	100	5%	1/10W	R5151	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5130	1-216-797-11	METAL CHIP	10	5%	1/10W	R5153	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5131	1-218-704-11	METAL CHIP	3.3K	0.50%	1/10W	R5154	1-216-833-11	METAL CHIP	10K	5%	1/10W
	(ALL EXCEPT KV-30HS420)					R5158	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5131	1-218-710-11	METAL CHIP	5.6K	0.5%	1/10W	R5160	1-216-809-11	METAL CHIP	100	5%	1/10W
	(KV-30HS420 ONLY)										
R5132	1-215-895-11	METAL OXIDE	3.3K	5%	2W	R5163	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
	(KV-30HS420 ONLY)					R5164	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5132	1-215-917-11	METAL OXIDE	1K	5%	3W	R5165	1-216-841-11	METAL CHIP	47K	5%	1/10W
	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					R5170	1-215-896-00	METAL OXIDE	4.7K		2W
R5132	1-215-918-00	METAL OXIDE	1.5K		3W		(KV-30HS420 ONLY)				
	(KV-27HS420, 29DRC420LN ONLY)					R5170	1-215-917-11	METAL OXIDE	1K	5%	3W
R5133	1-215-895-11	METAL OXIDE	3.3K	5%	2W		(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)				
	(KV-30HS420 ONLY)					R5170	1-215-918-00	METAL OXIDE	1.5K		3W
R5133	1-215-917-11	METAL OXIDE	1K	5%	3W		(KV-27HS420, 29DRC420LN ONLY)				
	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					R5171	1-215-896-00	METAL OXIDE	4.7K		2W
R5133	1-215-918-00	METAL OXIDE	1.5K		3W		(KV-30HS420 ONLY)				
	(KV-27HS420, 29DRC420LN ONLY)					R5171	1-215-917-11	METAL OXIDE	1K	5%	3W
R5135	1-215-895-11	METAL OXIDE	3.3K	5%	2W		(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)				
	(KV-30HS420 ONLY)					R5171	1-215-918-00	METAL OXIDE	1.5K		3W
R5135	1-215-917-11	METAL OXIDE	1K	5%	3W		(KV-27HS420, 29DRC420LN ONLY)				
	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					R5172	1-260-288-11	CARBON	0.47	5%	1/2W
R5135	1-215-918-00	METAL OXIDE	1.5K		3W						
	(KV-27HS420, 29DRC420LN ONLY)					R5173	1-260-288-11	CARBON	0.47	5%	1/2W
R5136	1-215-895-11	METAL OXIDE	3.3K	5%	2W	R5176	1-216-833-11	METAL CHIP	10K	5%	1/10W
	(KV-30HS420 ONLY)					R5501	1-218-716-11	METAL CHIP	10K	0.5%	1/10W
R5136	1-215-917-11	METAL OXIDE	1K	5%	3W		(KV-30HS420 ONLY)				
	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					R5501	1-218-730-11	METAL CHIP	39K	0.50%	1/10W
R5136	1-215-918-00	METAL OXIDE	1.5K		3W		(ALL EXCEPT KV-30HS420)				
	(KV-27HS420, 29DRC420LN ONLY)					R5502	1-216-864-11	SHORT CHIP			
R5137	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R5503	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5138	1-216-821-11	METAL CHIP	1K	5%	1/10W	R5505	1-218-750-11	METAL CHIP	270K	0.50%	1/10W
R5139	1-216-821-11	METAL CHIP	1K	5%	1/10W	R5506	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5141	1-215-890-11	METAL OXIDE	470	5%	2W	R5507	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5142	1-216-365-00	METAL OXIDE	0.47	5%	2W						
R5143	1-216-365-00	METAL OXIDE	0.47	5%	2W	R5508	1-216-837-11	METAL CHIP	22K	5%	1/10W
R5144	1-216-365-00	METAL OXIDE	0.47	5%	2W	R5510	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5145	1-215-880-00	METAL OXIDE	10	5%	2W	R5512	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5146	1-249-437-11	CARBON	47K	5%	1/4W	R5513	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5147	1-218-704-11	METAL CHIP	3.3K	0.50%	1/10W	R5518	1-218-728-11	METAL CHIP	33K	0.50%	1/10W
	(ALL EXCEPT KV-30HS420)					R5519	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
R5147	1-218-710-11	METAL CHIP	5.6K	0.5%	1/10W	R5520	1-216-833-11	METAL CHIP	10K	5%	1/10W
	(KV-30HS420 ONLY)					R5521	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5148	1-215-865-11	METAL OXIDE	220	5%	1W	R5522	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R5150	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R5523	1-218-744-11	METAL CHIP	150K	0.50%	1/10W
						R5524	1-216-839-11	METAL CHIP	33K	5%	1/10W
						R5525	1-216-853-11	METAL CHIP	470K	5%	1/10W


NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.




















REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R5526	1-216-853-11	METAL CHIP	470K	5%	1/10W	R5562	1-218-734-11	METAL CHIP	56K	0.50%	1/10W
R5527	1-216-833-11	METAL CHIP	10K	5%	1/10W		(ALL EXCEPT KV-29DRC420LS)				
R5528	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5565	1-249-377-11	CARBON	0.47	5%	1/4W
R5529	1-218-702-11	METAL CHIP	2.7K	0.50%	1/10W	R5566	1-249-401-11	CARBON	47	5%	1/4W
R5530	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R5567	1-216-809-11	METAL CHIP	100	5%	1/10W
R5532	1-216-821-11	METAL CHIP	1K	5%	1/10W	R5568	1-216-853-11	METAL CHIP	470K	5%	1/10W
R5533	1-218-740-11	METAL CHIP	100K	0.50%	1/10W	R5569	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5535	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R5570	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5536	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R5571	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5537	1-218-732-11	METAL CHIP	47K	0.50%	1/10W	R5572	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5538	1-216-837-11	METAL CHIP	22K	5%	1/10W	R5576	1-249-395-11	CARBON	15	5%	1/4W
R5539	1-216-849-11	METAL CHIP	220K	5%	1/10W	R5578	1-218-730-11	METAL CHIP	39K	0.50%	1/10W
R5540	1-214-800-11	METAL	2.2	1%	1/2W	R5579	1-218-732-11	METAL CHIP	47K	0.50%	1/10W
R5541	1-216-849-11	METAL CHIP	220K	5%	1/10W	R5580	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R5542	1-216-837-11	METAL CHIP	22K	5%	1/10W		(ALL EXCEPT KV-30HS420)				
R5543	1-216-821-11	METAL CHIP	1K	5%	1/10W	R5580	1-216-837-11	METAL CHIP	22K	5%	1/10W
R5544	1-218-716-11	METAL CHIP	10K	0.50%	1/10W		(KV-30HS420 ONLY)				
R5545	1-218-732-11	METAL CHIP	47K	0.50%	1/10W	R5581	1-218-708-11	METAL CHIP	4.7K	0.50%	1/10W
R5546	1-216-864-11	SHORT CHIP				R5582	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5547	1-216-821-11	METAL CHIP	1K	5%	1/10W	R5588	1-216-353-00	METAL OXIDE	2.2	5%	1W
	(KV-30HS420 ONLY)					R5593	1-218-692-11	METAL CHIP	1K	0.50%	1/10W
R5547	1-216-837-11	METAL CHIP	22K	5%	1/10W	R5594	1-216-833-11	METAL CHIP	10K	5%	1/10W
	(ALL EXCEPT KV-30HS420)						(ALL EXCEPT KV-29DRC420LS)				
R5548	1-216-821-11	METAL CHIP	1K	5%	1/10W	R5597	1-218-750-11	METAL CHIP	270K	0.50%	1/10W
	(KV-30HS420 ONLY)					R5603	1-216-857-11	METAL CHIP	1M	5%	1/10W
R5548	1-216-841-11	METAL CHIP	47K	5%	1/10W						
	(ALL EXCEPT KV-30HS420)					R5604	1-216-857-11	METAL CHIP	1M	5%	1/10W
R5549	1-218-692-11	METAL CHIP	1K	0.50%	1/10W	R5711	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
R5551	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R5712	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
R5552	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R6501	1-218-662-11	METAL CHIP	56	0.50%	1/10W
R5553	1-218-724-11	METAL CHIP	22K	0.50%	1/10W	R6502	1-260-131-11	CARBON	470K	5%	1/2W
R5554	1-218-732-11	METAL CHIP	47K	0.50%	1/10W	R6503	1-216-835-11	METAL CHIP	15K	5%	1/10W
R5555	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R6505	1-218-668-11	METAL CHIP	100	0.50%	1/10W
R5556	1-218-708-11	METAL CHIP	4.7K	0.50%	1/10W	R6507	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5557	1-218-692-11	METAL CHIP	1K	0.50%	1/10W	R6508	1-249-393-11	CARBON	10	5%	1/4W
R5558	1-218-692-11	METAL CHIP	1K	0.50%	1/10W	R6509	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5559	1-218-720-11	METAL CHIP	15K	0.5%	1/10W						
	(KV-30HS420 ONLY)					R6510	1-249-393-11	CARBON	10	5%	1/4W
R5559	1-218-724-11	METAL CHIP	22K	0.50%	1/10W	R6511	1-260-298-51	CARBON	3.3	5%	1/2W
	(ALL EXCEPT KV-30HS420)					R6513	1-245-478-31	METAL	470K	1%	1/4W
R5560	1-216-841-11	METAL CHIP	47K	5%	1/10W	R6514	1-245-477-31	METAL	430K	1%	1/4W
	(ALL EXCEPT KV-29DRC420LS)					R6515	1-260-131-11	CARBON	470K	5%	1/2W
R5561	1-218-740-11	METAL CHIP	100K	0.50%	1/10W	 R6516	1-244-207-11	WIREWOUND	3.3	5%	10W
						R6517	1-218-714-11	METAL CHIP	8.2K	0.50%	1/10W
						R6518	1-218-719-11	METAL CHIP	13K	0.50%	1/10W


NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.





REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R6519	1-216-864-11	SHORT CHIP				R8020	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6521	1-260-328-11	CARBON	1K	5%	1/2W	R8021	1-218-674-11	METAL CHIP	180	0.50%	1/10W
R6524	1-216-813-11	METAL CHIP	220	5%	1/10W	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					
R6525	1-216-813-11	METAL CHIP	220	5%	1/10W	R8021	1-216-864-11	SHORT CHIP			
R6526	1-202-933-61	FUSIBLE	0.1	10%	1/2W	(KV-27HS420, 29DRC420LN, 30HS420 ONLY)					
R6527	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R8022	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6528	1-216-809-11	METAL CHIP	100	5%	1/10W	R8024	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6529	1-249-393-11	CARBON	10	5%	1/4W	R8025	1-216-821-11	METAL CHIP	1K	5%	1/10W
R6530	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R8026	1-218-698-11	METAL CHIP	1.8K	0.50%	1/10W
R6531	1-249-393-11	CARBON	10	5%	1/4W	R8027	1-218-736-11	METAL CHIP	68K	0.50%	1/10W
R6532	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8028	1-218-710-11	METAL CHIP	5.6K	0.50%	1/10W
R6533	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8029	1-218-736-11	METAL CHIP	68K	0.50%	1/10W
R6535	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8030	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
R6536	1-249-417-11	CARBON	1K	5%	1/4W	R8031	1-218-740-11	METAL CHIP	100K	0.50%	1/10W
R6537	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8032	1-216-844-11	METAL CHIP	82K	5%	1/10W
R6538	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8033	1-216-821-11	METAL CHIP	1K	5%	1/10W
R6539	1-215-900-11	METAL OXIDE	22K	5%	2W	 R8035	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W
R6542	1-216-821-11	METAL CHIP	1K	5%	1/10W	 R8036	1-215-415-00	METAL	560	1%	1/4W
R6544	1-216-864-11	SHORT CHIP				(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					
R6545	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	 R8036	1-215-419-00	METAL	820		1/4W
R6547	1-216-864-11	SHORT CHIP				(KV-27HS420, 29DRC420LN, 30HS420 ONLY)					
R6548	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	 R8037	1-215-445-00	METAL	10K	1%	1/4W
R6556	1-243-979-71	METAL OXIDE	0.1	5%	2W	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					
R6557	1-243-979-71	METAL OXIDE	0.1	5%	2W	 R8037	1-215-447-00	METAL	12K		1/4W
 R6590	1-249-415-11	CARBON	680	5%	1/4W	(KV-27HS420, 29DRC420LN, 30HS420 ONLY)					
R6593	1-249-405-11	CARBON	100	5%	1/4W	 R8038	1-215-445-00	METAL	10K	1%	1/4W
R6595	1-249-377-11	CARBON	0.47	5%	1/4W	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					
R6602	1-216-821-11	METAL CHIP	1K	5%	1/10W	 R8038	1-215-447-00	METAL	12K		1/4W
R6605	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	(KV-27HS420, 29DRC420LN, 30HS420 ONLY)					
R8001	1-216-809-11	METAL CHIP	100	5%	1/10W	 R8039	1-215-445-00	METAL	10K	1%	1/4W
R8003	1-216-837-11	METAL CHIP	22K	5%	1/10W	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					
R8004	1-218-708-11	METAL CHIP	4.7K	0.50%	1/10W	 R8039	1-215-447-00	METAL	12K		1/4W
R8005	1-216-837-11	METAL CHIP	22K	5%	1/10W	(KV-27HS420, 29DRC420LN, 30HS420 ONLY)					
R8006	1-245-494-31	METAL	2.2M	2%	1/4W	 R8040	1-215-443-00	METAL	8.2K		1/4W
R8007	1-245-494-31	METAL	2.2M	2%	1/4W	(KV-27HS420, 29DRC420LN, 30HS420 ONLY)					
R8010	1-216-864-11	SHORT CHIP				 R8040	1-215-445-00	METAL	10K	1%	1/4W
R8011	1-216-849-11	METAL CHIP	220K	5%	1/10W	(KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)					
R8012	1-249-419-11	CARBON	1.5K	5%	1/4W	R8041	1-216-864-11	SHORT CHIP			
R8013	1-216-833-11	METAL CHIP	10K	5%	1/10W	 R8043	1-215-447-00	METAL	12K	1%	1/4W
R8014	1-218-692-11	METAL CHIP	1K	0.50%	1/10W	R8046	1-218-696-11	METAL CHIP	1.5K	0.50%	1/10W
 R8015	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W	R8049	1-218-668-11	METAL CHIP	100	0.50%	1/10W
R8016	1-247-843-11	CARBON	3.3K	5%	1/4W	R8050	1-218-656-11	METAL CHIP	33	0.50%	1/10W
 R8017	1-218-705-11	METAL CHIP	3.6K	0.50%	1/10W	R8051	1-202-933-61	FUSIBLE	0.1	10%	1/2W
 R8019	1-218-719-11	METAL CHIP	13K	0.50%	1/10W						


NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R8052	1-218-732-11	METAL CHIP (KV-29DRC420LS ONLY)	47K		1/10W	R8101	1-208-834-11	METAL CHIP	150K	0.50%	1/10W
R8052	1-218-741-11	METAL CHIP (KV-32HS420, 34HS420, 36HS420 ONLY)	110K	0.50%	1/10W	R8102	1-249-433-11	CARBON	22K	5%	1/4W
R8052	1-218-745-11	METAL CHIP (KV-27HS420, 29DRC420LN, 30HS420 ONLY)	160K		1/10W	R8103	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W
R8053	1-245-478-31	METAL	470K	1%	1/4W	R8104	1-216-841-11	METAL CHIP	47K	5%	1/10W
R8054	1-245-478-31	METAL	470K	1%	1/4W	R8105	1-216-809-11	METAL CHIP	100	5%	1/10W
R8056	1-218-714-11	METAL CHIP	8.2K	0.50%	1/10W	R8106	1-249-377-11	CARBON	0.47	5%	1/4W
R8057	1-218-719-11	METAL CHIP	13K	0.50%	1/10W	R8108	1-216-845-11	METAL CHIP	100K	5%	1/10W
R8058	1-249-393-11	CARBON	10	5%	1/4W	R8109	1-218-918-00	METAL OXIDE (KV-30HS420 ONLY)	1.5K		3W
R8059	1-216-813-11	METAL CHIP	220	5%	1/10W	R8109	1-215-922-11	METAL OXIDE (KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)	6.8K	5%	3W
R8060	1-216-813-11	METAL CHIP	220	5%	1/10W	R8109	1-216-486-00	METAL OXIDE (KV-27HS420, 29DRC420LN ONLY)	8.2K		3W
R8061	1-249-393-11	CARBON	10	5%	1/4W	R8110	1-208-842-11	METAL CHIP	330K	0.50%	1/10W
R8062	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8111	1-216-486-00	METAL OXIDE (KV-27HS420, 29DRC420LN ONLY)	8.2K		3W
R8063	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8111	1-218-918-00	METAL OXIDE (KV-30HS420 ONLY)	1.5K		3W
R8066	1-216-821-11	METAL CHIP	1K	5%	1/10W	R8111	1-215-922-11	METAL OXIDE (KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)	6.8K	5%	3W
R8069	1-249-425-11	CARBON	4.7K	5%	1/4W	R8112	1-216-845-11	METAL CHIP	100K	5%	1/10W
R8070	1-243-979-71	METAL OXIDE	0.1	5%	2W	R8113	1-208-842-11	METAL CHIP	330K	0.50%	1/10W
R8072	1-249-377-11	CARBON	0.47	5%	1/4W	R8114	1-216-486-00	METAL OXIDE (KV-27HS420, 29DRC420LN ONLY)	8.2K		3W
R8076	1-249-409-11	CARBON	220	5%	1/4W	R8114	1-218-918-00	METAL OXIDE (KV-30HS420 ONLY)	1.5K		3W
R8077	1-216-864-11	SHORT CHIP				R8114	1-215-922-11	METAL OXIDE (KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)	6.8K	5%	3W
 R8078	1-218-740-11	METAL CHIP	100K	0.50%	1/10W	R8115	1-216-821-11	METAL CHIP	1K	5%	1/10W
R8079	1-249-431-11	CARBON	15K	5%	1/4W	R8116	1-218-918-00	METAL OXIDE (KV-30HS420 ONLY)	1.5K		3W
R8080	1-249-393-11	CARBON (ALL EXCEPT KV-30HS420)	10	5%	1/4W	R8116	1-215-923-00	METAL OXIDE (KV-27HS420, 29DRC420LN ONLY)	10K		3W
R8080	1-249-401-11	CARBON (KV-30HS420 ONLY)	47	5%	1/4W	R8116	1-216-485-11	METAL OXIDE (KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)	5.6K	5%	3W
R8082	1-216-863-11	METAL CHIP	3.3M	5%	1/10W	R8117	1-216-845-11	METAL CHIP	100K	5%	1/10W
R8085	1-219-748-11	METAL	4.7K	5%	1/2W	R8118	1-216-839-11	METAL CHIP	33K	5%	1/10W
R8086	1-219-749-91	METAL	10K	5%	1/2W	R8119	1-218-918-00	METAL OXIDE (KV-30HS420 ONLY)	1.5K		3W
R8087	1-216-864-11	SHORT CHIP				R8119	1-215-923-00	METAL OXIDE (KV-27HS420, 29DRC420LN ONLY)	10K		3W
R8088	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8119	1-216-485-11	METAL OXIDE (KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)	5.6K	5%	3W
R8089	1-216-841-11	METAL CHIP	47K	5%	1/10W	R8119	1-215-923-00	METAL OXIDE (KV-27HS420, 29DRC420LN ONLY)	10K		3W
R8090	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8119	1-216-485-11	METAL OXIDE (KV-32HS420, 34HS420, 36HS420, 29DRC420LS ONLY)	5.6K	5%	3W
R8093	1-208-834-11	METAL CHIP	150K	0.50%	1/10W	R8123	1-216-809-11	METAL CHIP	100	5%	1/10W
R8096	1-216-864-11	SHORT CHIP									
R8097	1-216-797-11	METAL CHIP	10	5%	1/10W						
R8098	1-249-441-11	CARBON (ALL EXCEPT KV-30HS420)	100K	5%	1/4W						
R8099	1-249-441-11	CARBON (ALL EXCEPT KV-30HS420)	100K	5%	1/4W						
R8100	1-249-441-11	CARBON (ALL EXCEPT KV-30HS420)	100K	5%	1/4W						

NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R8124	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R8125	1-216-797-11	METAL CHIP	10	5%	1/10W						
R8126	1-216-797-11	METAL CHIP	10	5%	1/10W						
R8135	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R8136	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R8137	1-216-821-11	METAL CHIP	1K	5%	1/10W						
R8138	1-216-857-11	METAL CHIP	1M	5%	1/10W						
R8144	1-216-849-11	METAL CHIP	220K	5%	1/10W						
R8145	1-216-841-11	METAL CHIP	47K	5%	1/10W						
R8146	1-216-821-11	METAL CHIP	1K	5%	1/10W						
R8150	1-216-841-11	METAL CHIP	47K	5%	1/10W						
R8151	1-216-841-11	METAL CHIP	47K	5%	1/10W						
R8158	1-216-809-11	METAL CHIP	100	5%	1/10W						
R8159	1-216-835-11	METAL CHIP	15K	5%	1/10W						
R8160	1-216-853-11	METAL CHIP	470K	5%	1/10W						
R8161	1-216-833-11	METAL CHIP	10K	5%	1/10W						
⚠ R8165	1-218-742-11	METAL CHIP	120K	0.50%	1/10W						
R8200	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R8202	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R8203	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R8204	1-216-825-11	METAL CHIP	2.2K	5%	1/10W						
R8206	1-216-817-11	METAL CHIP	470	5%	1/10W						
							</				





REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES
C1541	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	D1518	8-719-914-43	DIODE	DAN202K
C1545	1-126-933-11	ELECT	100μF	20%	16V	D1519	8-719-977-28	DIODE	DTZ10B
C1546	1-164-156-11	CERAMIC CHIP	0.1μF		25V	D1520	8-719-977-28	DIODE	DTZ10B
C1548	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	D1521	8-719-977-28	DIODE	DTZ10B
C1550	1-126-960-11	ELECT	1μF	20%	50V	D1522	8-719-977-28	DIODE	DTZ10B
C1551	1-126-960-11	ELECT	1μF	20%	50V	D1523	8-719-977-28	DIODE	DTZ10B
C1552	1-126-960-11	ELECT	1μF	20%	50V	D1524	8-719-977-28	DIODE	DTZ10B
C1553	1-126-960-11	ELECT	1μF	20%	50V	D1525	8-719-977-28	DIODE	DTZ10B
C1554	1-126-960-11	ELECT	1μF	20%	50V	D1526	8-719-977-28	DIODE	DTZ10B
C1555	1-126-960-11	ELECT	1μF	20%	50V	D1527	8-719-977-28	DIODE	DTZ10B
C1556	1-126-933-11	ELECT	100μF	20%	16V	D1528	8-719-977-28	DIODE	DTZ10B
C1557	1-164-156-11	CERAMIC CHIP	0.1μF		25V	D1529	8-719-977-28	DIODE	DTZ10B
C1558	1-126-933-11	ELECT	100μF	20%	16V	D1530	8-719-977-28	DIODE	DTZ10B
C1559	1-126-933-11	ELECT	100μF	20%	16V	D1531	8-719-977-28	DIODE	DTZ10B
C1560	1-126-933-11	ELECT	100μF	20%	16V	D1532	8-719-977-28	DIODE	DTZ10B
C1561	1-126-933-11	ELECT	100μF	20%	16V	D1533	8-719-977-28	DIODE	DTZ10B
C1562	1-126-933-11	ELECT	100μF	20%	16V	D1534	8-719-977-28	DIODE	DTZ10B
C1563	1-126-933-11	ELECT	100μF	20%	16V	D1535	8-719-977-28	DIODE	DTZ10B
CONNECTOR						IC			
* CN1501	1-764-334-11	PIN, CONNECTOR(PCB)(V TYPE)	11P			IC1502	8-752-080-04	IC	CXA2069Q
CN1502	1-793-173-11	PIN, PC CONNECTOR(PC BOARD)	50P			IC1505	8-759-548-56	IC	M52055FP
CN1503	1-793-419-11	CONNECTOR, BOARD TO BOARD	4P						
DIODE						JACK			
D1501	8-719-977-28	DIODE	DTZ10B			J1501	1-573-967-12	BLOCK, (S) TERMINAL	
D1502	8-719-977-28	DIODE	DTZ10B			J1502	1-750-516-21	JACK BLOCK, PIN	2P
D1503	8-719-977-28	DIODE	DTZ10B			J1503	1-750-517-21	JACK BLOCK, PIN	3P
D1504	8-719-977-28	DIODE	DTZ10B			J1504	1-750-517-21	JACK BLOCK, PIN	3P
D1505	8-719-977-28	DIODE	DTZ10B			J1505	1-764-143-11	JACK	
D1506	8-719-977-28	DIODE	DTZ10B			J1506	1-764-143-11	JACK	
D1507	8-719-977-28	DIODE	DTZ10B			J1508	1-815-015-11	JACK BLOCK, PIN	
D1508	8-719-977-28	DIODE	DTZ10B			J1509	1-815-015-11	JACK BLOCK, PIN	
D1509	8-719-977-28	DIODE	DTZ10B						
D1510	8-719-977-28	DIODE	DTZ10B			COIL			
D1511	8-719-977-28	DIODE	DTZ10B			L1502	1-469-555-21	INDUCTOR	10μH
D1512	8-719-977-28	DIODE	DTZ10B			L1503	1-469-555-21	INDUCTOR	10μH
D1513	8-719-977-28	DIODE	DTZ10B			L1504	1-469-555-21	INDUCTOR	10μH
D1514	8-719-977-28	DIODE	DTZ10B			L1505	1-469-555-21	INDUCTOR	10μH
D1515	8-719-977-28	DIODE	DTZ10B			L1506	1-469-555-21	INDUCTOR	10μH
D1516	8-719-977-28	DIODE	DTZ10B						
D1517	8-719-977-28	DIODE	DTZ10B						



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
<u>TRANSISTOR</u>						R1523	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
Q1501	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R1524	1-216-809-11	METAL CHIP	100	5%	1/10W
Q1502	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R1525	1-216-809-11	METAL CHIP	100	5%	1/10W
Q1503	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R1526	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q1504	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R1527	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q1505	8-729-422-27	TRANSISTOR	2SD601A-Q			R1530	1-216-809-11	METAL CHIP	100	5%	1/10W
Q1506	8-729-422-27	TRANSISTOR	2SD601A-Q			R1531	1-216-809-11	METAL CHIP	100	5%	1/10W
Q1507	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R1532	1-216-809-11	METAL CHIP	100	5%	1/10W
Q1508	8-729-422-27	TRANSISTOR	2SD601A-Q			R1533	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
Q1509	8-729-422-27	TRANSISTOR	2SD601A-Q			R1534	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q1510	8-729-422-27	TRANSISTOR	2SD601A-Q			R1535	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q1511	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R1536	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q1512	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R1537	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q1513	8-729-422-27	TRANSISTOR	2SD601A-Q			R1538	1-216-806-11	METAL CHIP	56	5%	1/10W
Q1515	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R1539	1-216-805-11	METAL CHIP	47	5%	1/10W
Q1516	8-729-422-27	TRANSISTOR	2SD601A-Q			R1540	1-216-809-11	METAL CHIP	100	5%	1/10W
Q1518	8-729-422-27	TRANSISTOR	2SD601A-Q			R1541	1-216-809-11	METAL CHIP	100	5%	1/10W
Q1519	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R1542	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
Q1520	8-729-422-27	TRANSISTOR	2SD601A-Q			R1543	1-216-809-11	METAL CHIP	100	5%	1/10W
Q1521	8-729-422-27	TRANSISTOR	2SD601A-Q			R1544	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
Q1522	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX			R1545	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
Q1523	8-729-422-27	TRANSISTOR	2SD601A-Q			R1546	1-216-809-11	METAL CHIP	100	5%	1/10W
Q1524	8-729-422-27	TRANSISTOR	2SD601A-Q			R1547	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
<u>RESISTOR</u>						R1548	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1501	1-216-853-11	METAL CHIP	470K	5%	1/10W	R1549	1-216-809-11	METAL CHIP	100	5%	1/10W
R1502	1-216-853-11	METAL CHIP	470K	5%	1/10W	R1550	1-216-809-11	METAL CHIP	100	5%	1/10W
R1503	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R1551	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1504	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R1552	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1505	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R1554	1-216-809-11	METAL CHIP	100	5%	1/10W
R1506	1-216-853-11	METAL CHIP	470K	5%	1/10W	R1555	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1507	1-216-853-11	METAL CHIP	470K	5%	1/10W	R1556	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1508	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R1557	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R1509	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R1558	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1510	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R1559	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R1511	1-216-853-11	METAL CHIP	470K	5%	1/10W	R1560	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1512	1-216-853-11	METAL CHIP	470K	5%	1/10W	R1562	1-216-809-11	METAL CHIP	100	5%	1/10W
R1513	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R1563	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R1514	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1565	1-216-809-11	METAL CHIP	100	5%	1/10W
R1520	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R1566	1-216-809-11	METAL CHIP	100	5%	1/10W
R1521	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R1567	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1522	1-216-824-11	METAL CHIP	1.8K	5%	1/10W	R1568	1-216-821-11	METAL CHIP	1K	5%	1/10W
						R1569	1-216-809-11	METAL CHIP	100	5%	1/10W
						R1570	1-216-809-11	METAL CHIP	100	5%	1/10W
						R1571	1-216-809-11	METAL CHIP	100	5%	1/10W


119


NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.






REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
<div><div>AY</div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div><div><div><div></div><div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>											


NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

AY


REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
C912	1-136-177-00	FILM (ALL EXCEPT KV-30HS420)	1μF 5% 50V	*	CN527	1-564-511-61	PLUG, CONNECTOR 8P
C915	1-162-959-11	CERAMIC CHIP (ALL EXCEPT KV-30HS420)	330pF 5% 50V	*	CN900	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P
C918	1-162-968-11	CERAMIC CHIP (ALL EXCEPT KV-30HS420)	0.0047μF 10% 50V	*	CN903	1-564-506-11 (ALL EXCEPT KV-30HS420)	PLUG, CONNECTOR 3P
C921	1-164-677-11	CERAMIC CHIP (ALL EXCEPT KV-30HS420)	0.033μF 10% 16V	DIODE			
C924	1-164-677-11	CERAMIC CHIP (ALL EXCEPT KV-30HS420)	0.033μF 10% 16V	D501	8-719-991-33	DIODE	1SS133T-77
C927	1-128-934-91	CERAMIC CHIP (ALL EXCEPT KV-30HS420)	0.33μF 20% 10V	D502	8-719-991-33	DIODE	1SS133T-77
C930	1-164-388-91	CERAMIC CHIP (ALL EXCEPT KV-30HS420)	270pF 5% 50V	D503	8-719-511-40	DIODE	S1VB40
C933	1-130-495-00	MYLAR (ALL EXCEPT KV-30HS420)	0.1μF 5% 50V	D504	8-719-991-33	DIODE	1SS133T-77
C939	1-126-933-11	ELECT (ALL EXCEPT KV-30HS420)	100μF 20% 16V	D505	8-719-991-33	DIODE	1SS133T-77
C942	1-162-927-11	CERAMIC CHIP (ALL EXCEPT KV-30HS420)	100pF 5% 50V	D508	8-719-991-33	DIODE	1SS133T-77
C945	1-126-933-11	ELECT (ALL EXCEPT KV-30HS420)	100μF 20% 16V	D509	8-719-991-33	DIODE	1SS133T-77
CONNECTOR				D510	8-719-991-33	DIODE	1SS133T-77
	CN501	1-695-915-11	TAB (CONTACT)	D511	8-719-991-33	DIODE	1SS133T-77
	CN503	1-580-843-11	PIN, CONNECTOR (POWER)	D512	8-719-991-33	DIODE	1SS133T-77
*	CN504	1-766-241-11	PIN, CONNECTOR (PC BOARD) 3P (ALL EXCEPT KV-27HS420, 29DRC420LN, 36HS420)	D513	8-719-991-33	DIODE	1SS133T-77
*	CN505	1-766-241-11	PIN, CONNECTOR (PC BOARD) 3P	D514	8-719-991-33	DIODE	1SS133T-77
*	CN506	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	D515	8-719-991-33	DIODE	1SS133T-77
*	CN507	1-764-812-12	CONNECTOR, BOARD TO BOARD 11P	D516	8-719-991-33	DIODE	1SS133T-77
*	CN508	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	D517	8-719-991-33	DIODE	1SS133T-77
*	CN509	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	D519	8-719-991-33	DIODE	1SS133T-77
	CN510	1-793-494-11	CONNECTOR, BOARD TO BOARD 40P	D520	8-719-991-33	DIODE	1SS133T-77
*	CN514	1-766-240-11	PIN, CONNECTOR (PC BOARD) 2P	D521	8-719-991-33	DIODE	1SS133T-77
	CN515	1-695-915-11	TAB (CONTACT)	D522	8-719-991-33	DIODE	1SS133T-77
	CN516	1-695-915-11	TAB (CONTACT)	D524	8-719-991-33	DIODE	1SS133T-77
	CN517	1-695-915-11	TAB (CONTACT)	D526	8-719-991-33	DIODE	1SS133T-77
	CN518	1-695-915-11	TAB (CONTACT)	D530	8-719-924-13	DIODE	MTZJ-T-77-22B
	CN519	1-695-915-11	TAB (CONTACT)	D531	8-719-924-13	DIODE	MTZJ-T-77-22B
	CN520	1-695-915-11	TAB (CONTACT)	D534	8-719-991-33	DIODE	1SS133T-77
*	CN521	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	D535	8-719-991-33	DIODE	1SS133T-77
*	CN524	1-564-515-11	PLUG, CONNECTOR 12P	D540	8-719-991-33	DIODE	1SS133T-77
*	CN526	1-564-508-11	PLUG, CONNECTOR 5P	D541	8-719-991-33	DIODE	1SS133T-77
				D548	8-719-991-33	DIODE	1SS133T-77
				D900	8-719-110-31 (ALL EXCEPT KV-30HS420)	DIODE	RD12ESB2
				D903	8-719-110-31 (ALL EXCEPT KV-30HS420)	DIODE	RD12ESB2
				FUSE			
					F501	1-532-506-51	FUSE 6.3A 250V


NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un triangle et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.








REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
<u>FERRITE BEAD</u>							
FB500	1-412-911-11	FERRITE	0μH				
FB501	1-412-911-11	FERRITE	0μH				
FB502	1-412-911-11	FERRITE	0μH				
<u>FUSE HOLDER</u>							
FH501	1-533-223-11	FUSE HOLDER	0A	0V			
FH502	1-533-223-11	FUSE HOLDER	0A	0V			
<u>IC</u>							
IC501	8-759-450-47	IC	BA05T				
IC502	8-759-520-49	IC	PQ30RV21				
IC504	6-700-898-01	IC	PQ05RD21				
IC505	8-759-653-07	IC	PQ09RD21				
IC508	8-759-246-70	IC	TA8216H				
IC900	8-749-016-08	IC	STK390-910				
	(ALL EXCEPT KV-30HS420)						
IC903	8-759-595-52	IC	CXA8070AP				
	(ALL EXCEPT KV-30HS420)						
<u>CHIP CONDUCTOR</u>							
JR501	1-216-864-11	SHORT CHIP					
JR502	1-216-864-11	SHORT CHIP					
JR509	1-216-864-11	SHORT CHIP					
JR510	1-216-864-11	SHORT CHIP					
JR511	1-216-864-11	SHORT CHIP					
JR512	1-216-864-11	SHORT CHIP					
JR513	1-216-864-11	SHORT CHIP					
JR514	1-216-864-11	SHORT CHIP					
JR515	1-216-864-11	SHORT CHIP					
JR516	1-216-864-11	SHORT CHIP					
<u>COIL</u>							
L502	1-412-525-31	INDUCTOR	10μH				
L505	1-469-320-21	INDUCTOR	100μH				
L506	1-469-320-21	INDUCTOR	100μH				
L507	1-469-317-21	INDUCTOR	10μH				
L508	1-412-529-11	INDUCTOR	22μH				


NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R508	1-219-512-11	METAL (ALL EXCEPT KV-29DRC420LS)	2.2M	5%	1/2W	R565	1-216-821-11	METAL CHIP	1K	5%	1/10W
 R509	1-244-268-11	CEMENTED (KV-29DRC420LS ONLY)	1	5%	20W	R570	1-216-833-11	METAL CHIP	10K	5%	1/10W
 R509	1-244-270-11	CEMENTED (ALL EXCEPT KV-29DRC420LS)	0.47	5%	20W	R572	1-216-809-11	METAL CHIP	100	5%	1/10W
 R510	1-244-268-11	CEMENTED (KV-29DRC420LS ONLY)	1	5%	20W	R573	1-216-847-11	METAL CHIP	150K	5%	1/10W
 R510	1-244-270-11	CEMENTED (ALL EXCEPT KV-29DRC420LS)	0.47	5%	20W	R574	1-216-809-11	METAL CHIP	100	5%	1/10W
R511	1-216-849-11	METAL CHIP	220K	5%	1/10W	R577	1-216-821-11	METAL CHIP	1K	5%	1/10W
R512	1-216-849-11	METAL CHIP	220K	5%	1/10W	R579	1-216-821-11	METAL CHIP	1K	5%	1/10W
R513	1-216-833-11	METAL CHIP	10K	5%	1/10W	R581	1-216-864-11	SHORT CHIP			
R515	1-216-833-11	METAL CHIP	10K	5%	1/10W	R582	1-216-864-11	SHORT CHIP			
R516	1-216-857-11	METAL CHIP	1M	5%	1/10W	R585	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R524	1-216-833-11	METAL CHIP	10K	5%	1/10W	R586	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R527	1-216-341-11	METAL OXIDE	0.22	5%	1W	R588	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R531	1-216-821-11	METAL CHIP	1K	5%	1/10W	R589	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R532	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R591	1-216-821-11	METAL CHIP	1K	5%	1/10W
R533	1-216-833-11	METAL CHIP	10K	5%	1/10W	R595	1-216-813-11	METAL CHIP	220	5%	1/10W
R534	1-218-716-11	METAL CHIP	10K	0.50%	1/10W	R596	1-216-833-11	METAL CHIP	10K	5%	1/10W
R535	1-218-722-11	METAL CHIP	18K	0.50%	1/10W	R598	1-216-833-11	METAL CHIP	10K	5%	1/10W
R536	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R599	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R537	1-218-750-11	METAL CHIP	270K	0.50%	1/10W	R601	1-216-813-11	METAL CHIP	220	5%	1/10W
R539	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R602	1-216-833-11	METAL CHIP	10K	5%	1/10W
R540	1-216-821-11	METAL CHIP	1K	5%	1/10W	R603	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R542	1-216-821-11	METAL CHIP	1K	5%	1/10W	R606	1-216-833-11	METAL CHIP	10K	5%	1/10W
R544	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R607	1-216-833-11	METAL CHIP	10K	5%	1/10W
R545	1-216-805-11	METAL CHIP	47	5%	1/10W	R610	1-216-821-11	METAL CHIP	1K	5%	1/10W
R546	1-216-805-11	METAL CHIP	47	5%	1/10W	R611	1-216-833-11	METAL CHIP	10K	5%	1/10W
R547	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R617	1-249-385-11	CARBON	2.2	5%	1/4W
R548	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R622	1-249-385-11	CARBON	2.2	5%	1/4W
R550	1-216-845-11	METAL CHIP	100K	5%	1/10W	R631	1-249-429-11	CARBON	10K	5%	1/4W
R551	1-216-833-11	METAL CHIP	10K	5%	1/10W	R632	1-249-429-11	CARBON	10K	5%	1/4W
R552	1-216-837-11	METAL CHIP	22K	5%	1/10W	R635	1-216-833-11	METAL CHIP	10K	5%	1/10W
R553	1-216-821-11	METAL CHIP	1K	5%	1/10W	R636	1-216-833-11	METAL CHIP	10K	5%	1/10W
R554	1-216-864-11	SHORT CHIP				R643	1-216-864-11	SHORT CHIP			
R555	1-216-833-11	METAL CHIP	10K	5%	1/10W	R646	1-216-864-11	SHORT CHIP			
R556	1-216-839-11	METAL CHIP	33K	5%	1/10W	R900	1-216-864-11	SHORT CHIP (ALL EXCEPT KV-30HS420)			
R557	1-216-821-11	METAL CHIP	1K	5%	1/10W	R903	1-260-288-11	CARBON (ALL EXCEPT KV-30HS420)	0.47	5%	1/2W
R558	1-216-857-11	METAL CHIP	1M	5%	1/10W	R906	1-260-288-11	CARBON (ALL EXCEPT KV-30HS420)	0.47	5%	1/2W
R559	1-216-847-11	METAL CHIP	150K	5%	1/10W	R909	1-216-843-11	METAL CHIP (ALL EXCEPT KV-30HS420)	68K	5%	1/10W
R560	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R912	1-216-381-11	METAL OXIDE (ALL EXCEPT KV-30HS420)	0.22	5%	3W
R563	1-216-823-11	METAL CHIP	1.5K	5%	1/10W						

NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

AY **HBY**

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R915	1-215-886-11	METAL OXIDE (ALL EXCEPT KV-30HS420)	100	5%	2W	THERMISTOR					
R918	1-218-708-11	METAL CHIP (ALL EXCEPT KV-30HS420)	4.7K	0.50%	1/10W	⚠ TH501	1-803-540-11	THERMISTOR, POSITIVE (KV-29DRC420LS ONLY)			
R920	1-216-864-11	SHORT CHIP (ALL EXCEPT KV-30HS420)				⚠ TH501	1-803-970-11	THERMISTOR, POSITIVE (ALL EXCEPT KV-29DRC420LS)			
R921	1-218-708-11	METAL CHIP (ALL EXCEPT KV-30HS420)	4.7K	0.50%	1/10W	TUNER					
R927	1-218-696-11	METAL CHIP (ALL EXCEPT KV-30HS420)	1.5K	0.50%	1/10W	TU502	8-598-593-40	TUNER, FSS BTF-WA421			
R930	1-218-708-11	METAL CHIP (ALL EXCEPT KV-30HS420)	4.7K	0.50%	1/10W	VARISTOR					
R933	1-218-708-11	METAL CHIP (ALL EXCEPT KV-30HS420)	4.7K	0.50%	1/10W	⚠ VD501	1-804-992-21	VARISTOR (ALL EXCEPT KV-29DRC420LS)			
R939	1-216-805-11	METAL CHIP (ALL EXCEPT KV-30HS420)	47	5%	1/10W	⚠ VD501	1-804-995-11	VARISTOR (KV-29DRC420LS ONLY)			
R942	1-216-429-00	METAL OXIDE (ALL EXCEPT KV-30HS420)	270	5%	1W	HBY					
R945	1-216-805-11	METAL CHIP (ALL EXCEPT KV-30HS420)	47	5%	1/10W	*	A-1302-942-A	HBY BOARD, COMPLETE			
R948	1-216-845-11	METAL CHIP (ALL EXCEPT KV-30HS420)	100K	5%	1/10W	CAPACITOR					
R949	1-218-708-11	METAL CHIP (ALL EXCEPT KV-30HS420)	4.7K	0.50%	1/10W	C1100	1-126-960-11	ELECT	1μF	20%	50V
R950	1-218-708-11	METAL CHIP (ALL EXCEPT KV-30HS420)	4.7K	0.50%	1/10W	C1101	1-126-960-11	ELECT	1μF	20%	50V
R951	1-216-845-11	METAL CHIP (ALL EXCEPT KV-30HS420)	100K	5%	1/10W	CONNECTOR					
R954	1-216-821-11	METAL CHIP (ALL EXCEPT KV-30HS420)	1K	5%	1/10W	* CN1100	1-764-334-11	PIN, CONNECTOR(PCB)(V TYPE)11P			
RELAY						DIODE					
⚠ RY501	1-755-389-11	RELAY (AC POWER)				D1100	8-719-977-28	DIODE	DTZ10B		
TRANSFORMER						D1101	8-719-977-28	DIODE	DTZ10B		
T502	1-437-697-11	TRANSFORMER, STANDBY (ALL EXCEPT KV-29DRC420LS)				D1103	8-719-977-28	DIODE	DTZ10B		
T502	1-437-742-11	TRANSFORMER, STANDBY (KV-29DRC420LS ONLY)				FILTER					
						FL1103	1-409-755-11	FERRITE	0μH		
						FL1104	1-409-755-11	FERRITE	0μH		
						JACK					
						J1100	1-770-053-12	TERMINAL BLOCK, S(LIGHT ANGLE)			

HB


Y


HC

X


CH


REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
<u>CHIP CONDUCTOR</u>					<u>IC</u>						
JR1100	1-216-864-11	SHORT CHIP				IC1051	8-742-212-20	HYB IC	SBX3081-71		
JR1101	1-216-864-11	SHORT CHIP									
JR1102	1-216-864-11	SHORT CHIP				<u>RESISTOR</u>					
JR1103	1-216-864-11	SHORT CHIP				R1052	1-249-409-11	CARBON	220	5%	1/4W
JR1104	1-216-864-11	SHORT CHIP				R1053	1-249-409-11	CARBON	220	5%	1/4W
						R1054	1-249-433-11	CARBON	22K	5%	1/4W
JR1105	1-216-864-11	SHORT CHIP				R1055	1-249-385-11	CARBON	2.2	5%	1/4W
JR1106	1-216-864-11	SHORT CHIP									
JR1107	1-216-864-11	SHORT CHIP				<u>SWITCH</u>					
					S1052	1-692-431-21	SWITCH, TACTILE				
<u>RESISTOR</u>					<div>CH</div>						
R1100	1-216-853-11	METAL CHIP	470K	5%	1/10W	* A-1400-550-A CH BOARD, MOUNTED					
R1101	1-216-853-11	METAL CHIP	470K	5%	1/10W	7-682-647-09 SCREW +PS 3X6					
R1102	1-218-665-11	METAL CHIP	75	0.50%	1/10W						
R1103	1-218-665-11	METAL CHIP	75	0.50%	1/10W						
R1104	1-216-864-11	SHORT CHIP				<u>CAPACITOR</u>					
						C9002	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
R1105	1-216-864-11	SHORT CHIP				C9003	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
R1106	1-216-821-11	METAL CHIP	1K	5%	1/10W	C9004	1-115-350-51	CERAMIC	0.0047μF		2KV
R1107	1-218-665-11	METAL CHIP	75	0.50%	1/10W	C9005	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	50V
R1108	1-216-864-11	SHORT CHIP				C9009	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V
<u>VARISTOR</u>					C9010	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V	
VD1102	1-803-974-21	VARISTOR, CHIP	(1608)			C9011	1-161-830-00	CERAMIC	0.0047μF		500V
<div>HCX</div>					C9012	1-161-830-00	CERAMIC	0.0047μF		500V	
* A-1302-943-A HCX BOARD, COMPLETE					C9013	1-163-035-00	CERAMIC CHIP	0.047μF		50V	
					C9014	1-161-830-00	CERAMIC	0.0047μF		500V	
<u>CAPACITOR</u>					C9015	1-163-227-11	CERAMIC CHIP	10pF	0.50pF	50V	
C1051	1-126-964-11	ELECT	10μF	20%	50V	C9018	1-107-961-91	ELECT	10μF	20%	250V
					C9019	1-163-035-00	CERAMIC CHIP	0.047μF		50V	
<u>CONNECTOR</u>					C9020	1-107-961-91	ELECT	10μF	20%	250V	
* CN1052	1-564-509-11	PLUG, CONNECTOR 6P				C9021	1-107-961-91	ELECT	10μF	20%	250V
					C9022	1-101-004-00	CERAMIC	0.01μF		50V	
<u>DIODE</u>					C9023	1-101-004-00	CERAMIC	0.01μF		50V	
D1051	8-719-070-80	DIODE	LNK0120022G			C9024	1-163-035-00	CERAMIC CHIP	0.047μF		50V
D1052	8-719-070-80	DIODE	LNK0120022G			C9025	1-104-653-11	ELECT	220μF	20%	16V
					C9026	1-163-035-00	CERAMIC CHIP	0.047μF		50V	
					C9027	1-101-004-00	CERAMIC	0.01μF		50V	
					C9028	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V	


NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un triangle et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
C9029	1-163-017-00	CERAMIC CHIP	0.0047μF 10% 50V	TRANSISTOR			
C9030	1-163-017-00	CERAMIC CHIP	0.0047μF 10% 50V	Q9001	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
C9031	1-115-350-51	CERAMIC	0.0047μF 2KV	Q9003	8-729-422-27	TRANSISTOR	2SD601A-Q
C9032	1-162-116-00	CERAMIC	680pF 10% 2KV	Q9004	8-729-422-27	TRANSISTOR	2SD601A-Q
C9033	1-107-662-11	ELECT	22μF 20% 350V	Q9005	8-729-422-27	TRANSISTOR	2SD601A-Q
C9036	1-115-339-11	CERAMIC CHIP	0.1μF 10% 50V	Q9009	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
C9042	1-126-940-11	ELECT	330μF 20% 25V	Q9010	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
C9046	1-126-933-11	ELECT	100μF 20% 16V	Q9011	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
CONNECTOR				Q9014	8-729-823-81	TRANSISTOR	2SC4632LS-CB7
* CN9001	1-764-334-11	PIN, CONNECTOR(PCB)(V TYPE)	11P	RESISTOR			
* CN9002	1-564-507-11	PLUG, CONNECTOR	4P	R9001	1-216-041-00	RES-CHIP	470 5% 1/10W
CN9003	1-695-915-11	TAB (CONTACT)		R9006	1-216-073-91	RES-CHIP	10K 5% 1/10W
CN9004	1-695-915-11	TAB (CONTACT)		R9007	1-208-789-11	METAL CHIP	2K 0.50% 1/10W
CN9005	1-695-915-11	TAB (CONTACT)		R9008	1-216-085-91	RES-CHIP	33K 5% 1/10W
CN9009	1-785-879-11	CONNECTOR, ONE TOUCH		R9012	1-216-049-11	RES-CHIP	1K 5% 1/10W
DIODE				R9013	1-216-049-11	RES-CHIP	1K 5% 1/10W
D9002	8-719-977-28	DIODE	DTZ10B	R9014	1-216-033-00	RES-CHIP	220 5% 1/10W
D9005	8-719-404-50	DIODE	MA111-TX	R9015	1-249-409-11	CARBON	220 5% 1/4W
D9006	8-719-051-85	DIODE	HSS83TD	R9016	1-216-033-00	RES-CHIP	220 5% 1/10W
D9007	8-719-051-85	DIODE	HSS83TD	R9018	1-216-041-00	RES-CHIP	470 5% 1/10W
D9008	8-719-051-85	DIODE	HSS83TD	R9019	1-216-041-00	RES-CHIP	470 5% 1/10W
D9009	8-719-908-03	DIODE	GP08D	R9026	1-208-789-11	METAL CHIP	2K 0.50% 1/10W
D9010	8-719-110-17	DIODE	RD10ESB2	R9031	1-208-789-11	METAL CHIP	2K 0.50% 1/10W
IC				R9033	1-215-447-00	METAL	12K 1% 1/4W
IC9001	8-759-360-83	IC	TDA6111Q/N4	R9034	1-215-439-00	METAL	5.6K 1% 1/4W
IC9002	8-759-360-83	IC	TDA6111Q/N4	R9035	1-208-790-11	METAL CHIP	2.2K 0.50% 1/10W
IC9003	8-759-360-83	IC	TDA6111Q/N4	R9036	1-216-049-11	RES-CHIP	1K 5% 1/10W
JACK				R9037	1-240-233-71	METAL OXIDE	100 5% 3W
 J9001	1-451-544-11	SOCKET, CRT		R9038	1-208-790-11	METAL CHIP	2.2K 0.50% 1/10W
COIL				R9039	1-208-790-11	METAL CHIP	2.2K 0.50% 1/10W
L9002	1-408-591-11	INDUCTOR	1μH	R9041	1-216-049-11	RES-CHIP	1K 5% 1/10W
L9003	1-408-591-11	INDUCTOR	1μH	R9042	1-216-049-11	RES-CHIP	1K 5% 1/10W
L9004	1-408-591-11	INDUCTOR	1μH	R9043	1-240-233-71	METAL OXIDE	100 5% 3W
L9005	1-406-666-21	INDUCTOR	150μH	R9044	1-240-233-71	METAL OXIDE	100 5% 3W
L9006	1-412-525-31	INDUCTOR	10μH	R9047	1-219-744-11	METAL	220 5% 1/2W
				R9048	1-216-049-11	RES-CHIP	1K 5% 1/10W
				R9049	1-216-049-11	RES-CHIP	1K 5% 1/10W
				R9050	1-249-424-11	CARBON	3.9K 5% 1/4W
				R9051	1-219-744-11	METAL	220 5% 1/2W
				R9052	1-219-744-11	METAL	220 5% 1/2W

NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés per un trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

CH HAX WY

REF. NO.		PART NO.	DESCRIPTION	VALUES			REF. NO.		PART NO.	DESCRIPTION	VALUES		
R9053	1-249-424-11	CARBON	3.9K	5%	1/4W	R1012	1-249-421-11	CARBON	2.2K	5%	1/4W		
R9054	1-249-424-11	CARBON	3.9K	5%	1/4W	R1013	1-249-425-11	CARBON	4.7K	5%	1/4W		
R9056	1-219-743-11	METAL	100	5%	1/2W	<div>SWITCH</div>							
R9057	1-219-510-11	METAL	470K	5%	1/2W								
R9059	1-219-746-11	METAL	1K	5%	1/2W								
R9061	1-219-743-11	METAL	100	5%	1/2W								
R9062	1-260-123-11	CARBON	100K	5%	1/2W								
R9063	1-216-097-11	RES-CHIP	100K	5%	1/10W	S1001	1-762-837-11	SWITCH, TACTILE					
R9065	1-216-067-00	RES-CHIP	5.6K	5%	1/10W	S1002	1-762-837-11	SWITCH, TACTILE					
R9068	1-216-101-00	RES-CHIP	150K	5%	1/10W	S1003	1-692-431-21	SWITCH, TACTILE					
R9070	1-249-411-11	CARBON	330	5%	1/4W	S1004	1-762-837-11	SWITCH, TACTILE					
R9071	1-249-411-11	CARBON	330	5%	1/4W	S1005	1-692-431-21	SWITCH, TACTILE					
R9072	1-216-037-00	RES-CHIP	330	5%	1/10W	S1006	1-762-837-11	SWITCH, TACTILE					
R9073	1-216-049-11	RES-CHIP	1K	5%	1/10W	S1007	1-692-431-21	SWITCH, TACTILE					
R9074	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	S1008	1-762-837-11	SWITCH, TACTILE					
R9077	1-216-073-91	RES-CHIP	10K	5%	1/10W	<div>WY</div> <div>* A-1415-589-A WY (VAR) BOARD, MOUNTED (KV-30HS420 ONLY)</div> <div>* A-1415-602-A WY (VAR) BOARD, MOUNTED (ALL EXCEPT KV-30HS420)</div> <div>4-382-854-01 SCREW (M3X8), P, SW (+)</div>							
R9089	1-208-806-11	METAL CHIP	10K	0.50%	1/10W								
R9091	1-215-429-00	METAL	2.2K	1%	1/4W								
VARIABLE RESISTOR													
RV9001	1-241-714-11	RES, ADJ, METAL FILM 110M											
<div>HAX</div> <div>* A-1405-292-A HAX BOARD, MOUNTED</div>						CAPACITOR							
						C9101	1-104-999-11	MYLAR	0.1µF	5%	200V		
						C9102	1-130-495-00	MYLAR	0.1µF	5%	50V		
						(KV-30HS420 ONLY)							
						C9104	1-126-933-11	ELECT	100µF	20%	16V		
CONNECTOR						C9105	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V		
						C9106	1-164-156-11	CERAMIC CHIP	0.1µF		25V		
						C9108	1-107-662-11	ELECT	22µF	20%	350V		
						C9109	1-161-830-00	CERAMIC	0.0047µF		500V		
						C9110	1-164-156-11	CERAMIC CHIP	0.1µF		25V		
RESISTOR						C9111	1-126-964-11	ELECT	10µF	20%	50V		
						C9112	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V		
						C9113	1-137-528-11	MYLAR	0.1µF	10%	250V		
						C9114	1-107-636-11	ELECT	10µF	20%	160V		
						C9115	1-137-528-11	MYLAR	0.1µF	10%	250V		
R1002	1-249-431-11	CARBON	15K	5%	1/4W	C9116	1-164-156-11	CERAMIC CHIP	0.1µF		25V		
R1003	1-249-413-11	CARBON	470	5%	1/4W	C9117	1-117-450-11	MYLAR	0.47µF	10%	250V		
R1004	1-249-415-11	CARBON	680	5%	1/4W	C9118	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V		
R1005	1-249-417-11	CARBON	1K	5%	1/4W	C9120	1-130-495-00	MYLAR	0.1µF	5%	50V		
R1006	1-249-421-11	CARBON	2.2K	5%	1/4W	C9121	1-126-947-11	ELECT	47µF	20%	35V		
R1007	1-249-425-11	CARBON	4.7K	5%	1/4W	C9125	1-130-495-00	MYLAR	0.1µF	5%	50V		
R1008	1-249-431-11	CARBON	15K	5%	1/4W								
R1009	1-249-413-11	CARBON	470	5%	1/4W								
R1010	1-249-415-11	CARBON	680	5%	1/4W								
R1011	1-249-417-11	CARBON	1K	5%	1/4W								

128



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9135	1-218-692-11	METAL CHIP	1K	0.50%	1/10W	C2823	1-117-681-11	ELECT CHIP	100μF	20%	16V
R9138	1-218-712-11	METAL CHIP	6.8K	0.50%	1/10W	C2824	1-117-681-11	ELECT CHIP	100μF	20%	16V
R9139	1-218-692-11	METAL CHIP	1K	0.50%	1/10W	C2825	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
R9140	1-216-864-11	SHORT CHIP				C2826	1-164-156-11	CERAMIC CHIP	0.1μF		25V
	(ALL EXCEPT KV-30HS420)					C2827	1-164-156-11	CERAMIC CHIP	0.1μF		25V
R9141	1-214-657-11	METAL	1	1%	1/4W	C2828	1-110-563-11	CERAMIC CHIP	0.068μF	10%	16V
R9142	1-214-657-11	METAL	1	1%	1/4W	C2829	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V
R9143	1-216-429-00	METAL OXIDE	270	5%	1W	C2830	1-128-996-11	ELECT CHIP	4.7μF	20%	50V
R9144	1-215-867-00	METAL OXIDE	470	5%	1W	C2831	1-117-681-11	ELECT CHIP	100μF	20%	16V
R9145	1-218-712-11	METAL CHIP	6.8K	0.50%	1/10W	C2833	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V
R9150	1-218-712-11	METAL CHIP	6.8K	0.50%	1/10W	C2834	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
R9187	1-249-389-11	CARBON	4.7	5%	1/4W	C2835	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
R9188	1-249-389-11	CARBON	4.7	5%	1/4W	C2836	1-164-156-11	CERAMIC CHIP	0.1μF		25V
R9189	1-249-389-11	CARBON	4.7	5%	1/4W	C2837	1-117-681-11	ELECT CHIP	100μF	20%	16V
R9190	1-249-389-11	CARBON	4.7	5%	1/4W	C2840	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
<div style="border: 1px solid black; padding: 5px; display: inline-block; font-size: 2em; font-weight: bold;">BY</div>						C2841	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
						C2842	1-117-681-11	ELECT CHIP	100μF	20%	16V
						C2843	1-164-156-11	CERAMIC CHIP	0.1μF		25V
						C2844	1-117-681-11	ELECT CHIP	100μF	20%	16V
						C2845	1-117-681-11	ELECT CHIP	100μF	20%	16V
						C2846	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
						C2847	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V
						C2849	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
						C2850	1-117-681-11	ELECT CHIP	100μF	20%	16V
						C2851	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2801	1-117-681-11	ELECT CHIP	100μF	20%	16V	C3001	1-128-453-21	ELECT CHIP	47μF	20%	6.3V
C2802	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3002	1-128-453-21	ELECT CHIP	47μF	20%	6.3V
C2804	1-162-923-11	CERAMIC CHIP	47pF	5%	50V	C3003	1-128-453-21	ELECT CHIP	47μF	20%	6.3V
C2805	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3005	1-126-204-11	ELECT CHIP	47μF	20%	16V
C2806	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C3006	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C2808	1-128-996-11	ELECT CHIP	4.7μF	20%	50V	C3008	1-126-204-11	ELECT CHIP	47μF	20%	16V
C2809	1-117-681-11	ELECT CHIP	100μF	20%	16V	C3009	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C2810	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3011	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2811	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3012	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2812	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C3013	1-128-391-11	ELECT CHIP	330μF	20%	6.3V
C2813	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3014	1-128-391-11	ELECT CHIP	330μF	20%	6.3V
C2814	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3015	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2815	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3016	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2816	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3017	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C2817	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3018	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2818	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V	C3019	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2819	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3020	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2820	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3021	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2821	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3023	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C2822	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V						

BY

* A-1302-940-A BY BOARD, COMPLETE

Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.

CAPACITOR



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3024	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	C3318	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3025	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3319	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3026	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3325	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3027	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3326	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3028	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3329	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3029	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3333	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3030	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3334	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3031	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3335	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3032	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3337	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3033	1-109-982-11	CERAMIC CHIP	1μF	10%	10V	C3341	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3034	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3343	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3035	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3349	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3036	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3350	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3037	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3351	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3038	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3357	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3040	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3358	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3042	1-128-391-11	ELECT CHIP	330μF	20%	6.3V	C3359	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3044	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3360	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3046	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3363	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3047	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3364	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3048	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3365	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3049	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3366	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3089	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3367	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3090	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3368	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3095	1-117-681-11	ELECT CHIP	100μF	20%	16V	C3369	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3096	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3370	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3097	1-117-681-11	ELECT CHIP	100μF	20%	16V	C3371	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3098	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3372	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3101	1-162-925-11	CERAMIC CHIP	68pF	5%	50V	C3374	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3102	1-162-925-11	CERAMIC CHIP	68pF	5%	50V	C3375	1-127-760-11	CERAMIC CHIP	4.7μF	10%	6.3V
C3103	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3376	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3301	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3377	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3302	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3378	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3303	1-126-206-11	ELECT CHIP	100μF	20%	6.3V	C3379	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3304	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3401	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3305	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3402	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3307	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3403	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3308	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3404	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3309	1-126-206-11	ELECT CHIP	100μF	20%	6.3V	C3405	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3313	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3406	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3314	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3407	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3315	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3408	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3316	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3409	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3317	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3410	1-164-156-11	CERAMIC CHIP	0.1μF		25V



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3411	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3457	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3412	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3458	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3413	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3460	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C3414	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3462	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3415	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3463	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3416	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3464	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3417	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3465	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3418	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3466	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3419	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3467	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3420	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3468	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3421	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3469	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3422	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3470	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3423	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3473	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3424	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3474	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3425	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C3475	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3426	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3476	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3428	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3477	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3429	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3478	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3430	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3479	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3431	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3480	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3432	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3481	1-117-681-11	ELECT CHIP	100μF	20%	16V
C3433	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3482	1-117-681-11	ELECT CHIP	100μF	20%	16V
C3434	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3483	1-117-681-11	ELECT CHIP	100μF	20%	16V
C3435	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3484	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C3436	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3485	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3437	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3486	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3438	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3487	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3439	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3488	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3440	1-162-916-11	CERAMIC CHIP	12pF	5%	50V	C3489	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3441	1-162-916-11	CERAMIC CHIP	12pF	5%	50V	C3490	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3442	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3491	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3443	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3492	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3444	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3493	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3445	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3494	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3446	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3495	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3447	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3496	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3448	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3499	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3449	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3500	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3450	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3501	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3452	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3613	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3453	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3614	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3454	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3615	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3455	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3617	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3456	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3618	1-127-760-11	CERAMIC CHIP	4.7μF	10%	6.3V



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
C3619	1-126-206-11	ELECT CHIP	100μF 20% 6.3V	IC3003	6-701-892-01	IC	TC90A90F(BH,DRY)
C3620	1-107-826-11	CERAMIC CHIP	0.1μF 10% 16V	IC3004	8-759-642-22	IC	UPC29M05T-E2
C3622	1-164-156-11	CERAMIC CHIP	0.1μF 25V	IC3089	6-704-573-01	IC	M24C32-WMN6T(B)
C3623	1-164-156-11	CERAMIC CHIP	0.1μF 25V	IC3090	6-801-376-01	IC	MB94918RpF-G-147-BND
C3624	1-164-156-11	CERAMIC CHIP	0.1μF 25V	IC3091	8-759-352-91	IC	PST9143NL
C3906	1-126-204-11	ELECT CHIP	47μF 20% 16V	IC3302	6-700-398-01	IC	UPC2918T-E1
C3912	1-126-206-11	ELECT CHIP	100μF 20% 6.3V	IC3303	8-752-409-78	IC	CXD2095AQ
CONNECTOR				IC3306	8-759-669-78	IC	TLC2933IPWR-12
* CN2803	1-564-509-11	PLUG, CONNECTOR	6P	IC3401	6-700-399-01	IC	UPC2925T-E1
* CN2805	1-764-334-11	PIN, CONNECTOR(PCB)(V TYPE)	11P	IC3402	6-702-318-01	IC	W986432DH-6
DIODE				IC3403	8-759-460-29	IC	PST9120NL
D2803	8-719-404-50	DIODE	MA111-TX	IC3404	8-759-669-75	IC	TLC2932IPWR
D2806	8-719-069-55	DIODE	UDZSTE-175.6B	IC3405	8-759-485-79	IC	TC7SET08FU(TE85L)
D3001	8-719-404-50	DIODE	MA111-TX	IC3406	8-759-485-79	IC	TC7SET08FU(TE85L)
D3002	8-719-083-58	DIODE	UDZSTE-173.9B	IC3407	8-759-485-79	IC	TC7SET08FU(TE85L)
D3089	8-719-800-76	DIODE	1SS226	IC3408	8-759-672-57	IC	CXD9509AQ
D3090	8-719-800-76	DIODE	1SS226	IC3409	8-759-833-72	IC	NJM2870F25-TE2
D3401	8-719-914-43	DIODE	DAN202K	IC3410	8-752-409-20	IC	CXD2309AQ
D3402	8-719-914-44	DIODE	DAP202K	IC3411	8-759-082-57	IC	TC7W04FU
D3403	8-719-978-33	DIODE	DTZ-TT11-6.8B	IC3413	8-759-549-07	IC	SN74LV157APWR
D3404	8-719-404-50	DIODE	MA111-TX	IC3414	8-759-548-56	IC	M52055FP
FERRITE BEAD				IC3608	8-759-669-75	IC	TLC2932IPWR
FB3001	1-500-451-11	FERRITE	0μH	COIL			
FB3002	1-216-864-11	SHORT CHIP		L2801	1-469-555-21	INDUCTOR	10μH
FB3303	1-216-809-11	METAL CHIP	100 5% 1/10W	L2803	1-469-555-21	INDUCTOR	10μH
FB3304	1-469-110-21	FERRITE	0μH	L2804	1-469-555-21	INDUCTOR	10μH
FB3401	1-414-235-22	FERRITE	0μH	L2805	1-469-555-21	INDUCTOR	10μH
FB3402	1-414-235-22	FERRITE	0μH	L2806	1-469-555-21	INDUCTOR	10μH
FB3403	1-216-864-11	SHORT CHIP		L2807	1-469-555-21	INDUCTOR	10μH
FB3624	1-216-864-11	SHORT CHIP		L2811	1-469-555-21	INDUCTOR	10μH
FILTER				L3001	1-216-295-91	SHORT CHIP	
FL3001	1-234-177-21	FERRITE	0μH	L3004	1-412-026-11	INDUCTOR	1μH
FL3002	1-234-177-21	FERRITE	0μH	L3005	1-412-026-11	INDUCTOR	1μH
FL3003	1-781-924-21	FILTER, LOW PASS (SMD)		L3007	1-469-555-21	INDUCTOR	10μH
FL3301	1-234-558-21	FILTER, LOW PASS		L3009	1-469-555-21	INDUCTOR	10μH
FL3302	1-234-557-21	FILTER, LOW PASS		L3010	1-469-555-21	INDUCTOR	10μH
FL3303	1-234-557-21	FILTER, LOW PASS		L3011	1-469-555-21	INDUCTOR	10μH
FL3401	1-781-923-21	FILTER, LOW PASS (SMD)		L3089	1-414-233-22	FERRITE	0μH
IC				L3102	1-469-552-21	INDUCTOR	3.3μH
IC2801	8-752-102-68	IC	CXA2170Q	L3304	1-469-555-21	INDUCTOR	10μH
IC3002	8-759-583-47	IC	UPC2933T-E2	L3310	1-469-561-21	INDUCTOR	100μH
				L3311	1-469-561-21	INDUCTOR	100μH
				L3402	1-412-052-21	INDUCTOR	1μH



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
L3403	1-469-561-21	INDUCTOR	100μH	Q3306	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
L3404	1-469-561-21	INDUCTOR	100μH	Q3307	8-729-422-27	TRANSISTOR	2SD601A-Q
L3405	1-469-555-21	INDUCTOR	10μH	Q3308	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
L3406	1-469-555-21	INDUCTOR	10μH	Q3309	8-729-422-27	TRANSISTOR	2SD601A-Q
L3407	1-469-555-21	INDUCTOR	10μH	Q3310	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
L3409	1-469-555-21	INDUCTOR	10μH	Q3311	8-729-422-27	TRANSISTOR	2SD601A-Q
L3411	1-412-058-11	INDUCTOR	10μH	Q3401	8-729-422-27	TRANSISTOR	2SD601A-Q
L3412	1-469-555-21	INDUCTOR	10μH	Q3402	8-729-028-28	TRANSISTOR	2SK2036(TE85L)
L3413	1-469-555-21	INDUCTOR	10μH	Q3403	8-729-422-27	TRANSISTOR	2SD601A-Q
L3414	1-469-555-21	INDUCTOR	10μH	Q3404	8-729-028-28	TRANSISTOR	2SK2036(TE85L)
L3416	1-469-555-21	INDUCTOR	10μH	Q3405	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
L3418	1-469-555-21	INDUCTOR	10μH	Q3406	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
L3903	1-412-052-21	INDUCTOR	1μH	Q3407	8-729-422-27	TRANSISTOR	2SD601A-Q
TRANSISTOR				Q3408	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
Q2801	8-729-122-63	TRANSISTOR	2SA1226-E4	Q3409	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2802	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	Q3410	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
Q2803	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	Q3411	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
Q2804	8-729-422-27	TRANSISTOR	2SD601A-Q	Q3412	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
Q2805	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	Q3413	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
Q2806	8-729-422-27	TRANSISTOR	2SD601A-Q	Q3414	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
Q2807	8-729-422-27	TRANSISTOR	2SD601A-Q	Q3415	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
Q2811	8-729-122-63	TRANSISTOR	2SA1226-E4	Q3416	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2812	8-729-122-63	TRANSISTOR	2SA1226-E4	RESISTOR			
Q2813	8-729-122-63	TRANSISTOR	2SA1226-E4	R2801	1-218-867-11	METAL CHIP	6.8K 0.50% 1/10W
Q2818	8-729-422-27	TRANSISTOR	2SD601A-Q	R2803	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
Q2819	8-729-422-27	TRANSISTOR	2SD601A-Q	R2804	1-216-805-11	METAL CHIP	47 5% 1/10W
Q2820	8-729-422-27	TRANSISTOR	2SD601A-Q	R2805	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
Q2821	8-729-422-27	TRANSISTOR	2SD601A-Q	R2806	1-216-863-11	METAL CHIP	3.3M 5% 1/10W
Q2822	8-729-422-27	TRANSISTOR	2SD601A-Q	R2807	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2823	8-729-422-27	TRANSISTOR	2SD601A-Q	R2808	1-216-834-11	METAL CHIP	12K 5% 1/10W
Q3003	8-729-422-27	TRANSISTOR	2SD601A-Q	R2809	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
Q3005	8-729-422-27	TRANSISTOR	2SD601A-Q	R2810	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
Q3006	8-729-422-27	TRANSISTOR	2SD601A-Q	R2811	1-216-809-11	METAL CHIP	100 5% 1/10W
Q3007	8-729-422-27	TRANSISTOR	2SD601A-Q	R2812	1-218-708-11	METAL CHIP	4.7K 0.50% 1/10W
Q3008	8-729-422-27	TRANSISTOR	2SD601A-Q	R2813	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q3009	8-729-422-27	TRANSISTOR	2SD601A-Q	R2815	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q3089	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	R2816	1-216-845-11	METAL CHIP	100K 5% 1/10W
Q3090	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	R2817	1-216-809-11	METAL CHIP	100 5% 1/10W
Q3092	8-729-422-27	TRANSISTOR	2SD601A-Q	R2818	1-216-809-11	METAL CHIP	100 5% 1/10W
Q3093	8-729-422-27	TRANSISTOR	2SD601A-Q	R2819	1-216-809-11	METAL CHIP	100 5% 1/10W
Q3302	8-729-422-27	TRANSISTOR	2SD601A-Q	R2820	1-216-809-11	METAL CHIP	100 5% 1/10W
Q3303	8-729-422-27	TRANSISTOR	2SD601A-Q	R2821	1-216-809-11	METAL CHIP	100 5% 1/10W
Q3305	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	R2823	1-216-841-11	METAL CHIP	47K 5% 1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2824	1-216-809-11	METAL CHIP	100	5%	1/10W	R2885	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2825	1-216-841-11	METAL CHIP	47K	5%	1/10W	R2886	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2826	1-218-716-11	METAL CHIP	10K	0.50%	1/10W	R2887	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2827	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2889	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2828	1-216-832-11	METAL CHIP	8.2K	5%	1/10W	R2890	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2829	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R2891	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2830	1-216-818-11	METAL CHIP	560	5%	1/10W	R2892	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2831	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R2893	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2832	1-216-809-11	METAL CHIP	100	5%	1/10W	R2894	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2833	1-216-809-11	METAL CHIP	100	5%	1/10W	R2895	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2834	1-216-809-11	METAL CHIP	100	5%	1/10W	R2896	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2835	1-216-809-11	METAL CHIP	100	5%	1/10W	R2897	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2836	1-216-809-11	METAL CHIP	100	5%	1/10W	R2898	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2837	1-216-809-11	METAL CHIP	100	5%	1/10W	R2899	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R2838	1-216-809-11	METAL CHIP	100	5%	1/10W	R2900	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2839	1-216-809-11	METAL CHIP	100	5%	1/10W	R2901	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2840	1-216-809-11	METAL CHIP	100	5%	1/10W	R2902	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2841	1-216-809-11	METAL CHIP	100	5%	1/10W	R2907	1-216-807-11	METAL CHIP	68	5%	1/10W
R2842	1-216-809-11	METAL CHIP	100	5%	1/10W	R2908	1-216-807-11	METAL CHIP	68	5%	1/10W
R2843	1-216-809-11	METAL CHIP	100	5%	1/10W	R2909	1-216-807-11	METAL CHIP	68	5%	1/10W
R2844	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	R2911	1-216-864-11	SHORT CHIP			
R2845	1-216-809-11	METAL CHIP	100	5%	1/10W	R2913	1-216-864-11	SHORT CHIP			
R2846	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R2919	1-218-724-11	METAL CHIP	22K	0.50%	1/10W
R2847	1-216-809-11	METAL CHIP	100	5%	1/10W	R2920	1-216-864-11	SHORT CHIP			
R2848	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R2921	1-216-864-11	SHORT CHIP			
R2849	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2922	1-216-864-11	SHORT CHIP			
R2850	1-216-809-11	METAL CHIP	100	5%	1/10W	R3002	1-216-864-11	SHORT CHIP			
R2851	1-216-815-11	METAL CHIP	330	5%	1/10W	R3004	1-216-864-11	SHORT CHIP			
R2853	1-216-864-11	SHORT CHIP				R3013	1-216-809-11	METAL CHIP	100	5%	1/10W
R2854	1-216-864-11	SHORT CHIP				R3014	1-216-809-11	METAL CHIP	100	5%	1/10W
R2858	1-218-716-11	METAL CHIP	10K	0.50%	1/10W	R3015	1-216-809-11	METAL CHIP	100	5%	1/10W
R2860	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3017	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2861	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3020	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R2862	1-216-809-11	METAL CHIP	100	5%	1/10W	R3021	1-216-809-11	METAL CHIP	100	5%	1/10W
R2865	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3022	1-216-809-11	METAL CHIP	100	5%	1/10W
R2866	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3023	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2867	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3025	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2868	1-216-809-11	METAL CHIP	100	5%	1/10W	R3026	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2869	1-216-809-11	METAL CHIP	100	5%	1/10W	R3029	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2870	1-216-809-11	METAL CHIP	100	5%	1/10W	R3030	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R2880	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	R3031	1-216-809-11	METAL CHIP	100	5%	1/10W
R2881	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	R3032	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2883	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3033	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2884	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3034	1-216-821-11	METAL CHIP	1K	5%	1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3035	1-216-809-11	METAL CHIP	100	5%	1/10W	R3102	1-216-809-11	METAL CHIP	100	5%	1/10W
R3036	1-216-809-11	METAL CHIP	100	5%	1/10W	R3103	1-216-809-11	METAL CHIP	100	5%	1/10W
R3037	1-216-809-11	METAL CHIP	100	5%	1/10W	R3104	1-216-809-11	METAL CHIP	100	5%	1/10W
R3038	1-218-686-11	METAL CHIP	560	0.50%	1/10W	R3105	1-216-809-11	METAL CHIP	100	5%	1/10W
R3039	1-218-686-11	METAL CHIP	560	0.50%	1/10W	R3107	1-216-864-11	SHORT CHIP			
R3040	1-218-686-11	METAL CHIP	560	0.50%	1/10W	R3108	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3043	1-216-864-11	SHORT CHIP				R3110	1-216-809-11	METAL CHIP	100	5%	1/10W
R3045	1-216-809-11	METAL CHIP	100	5%	1/10W	R3111	1-216-809-11	METAL CHIP	100	5%	1/10W
R3047	1-216-864-11	SHORT CHIP				R3116	1-216-797-11	METAL CHIP	10	5%	1/10W
R3049	1-216-859-11	METAL CHIP	1.5M	5%	1/10W	R3117	1-216-797-11	METAL CHIP	10	5%	1/10W
R3050	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3302	1-216-817-11	METAL CHIP	470	5%	1/10W
R3051	1-216-864-11	SHORT CHIP				R3303	1-218-710-11	METAL CHIP	5.6K	0.50%	1/10W
R3056	1-216-817-11	METAL CHIP	470	5%	1/10W	R3304	1-216-809-11	METAL CHIP	100	5%	1/10W
R3057	1-216-817-11	METAL CHIP	470	5%	1/10W	R3323	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3058	1-216-817-11	METAL CHIP	470	5%	1/10W	R3324	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R3059	1-216-809-11	METAL CHIP	100	5%	1/10W	R3325	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R3060	1-216-809-11	METAL CHIP	100	5%	1/10W	R3326	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3061	1-216-809-11	METAL CHIP	100	5%	1/10W	R3335	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3063	1-216-864-11	SHORT CHIP				R3341	1-216-813-11	METAL CHIP	220	5%	1/10W
R3064	1-216-864-11	SHORT CHIP				R3342	1-218-705-11	METAL CHIP	3.6K	0.50%	1/10W
R3066	1-216-809-11	METAL CHIP	100	5%	1/10W	R3343	1-216-809-11	METAL CHIP	100	5%	1/10W
R3068	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3344	1-216-853-11	METAL CHIP	470K	5%	1/10W
R3069	1-216-820-11	METAL CHIP	820	5%	1/10W	R3345	1-218-704-11	METAL CHIP	3.3K	0.50%	1/10W
R3070	1-216-864-11	SHORT CHIP				R3346	1-216-809-11	METAL CHIP	100	5%	1/10W
R3071	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3347	1-216-815-11	METAL CHIP	330	5%	1/10W
R3072	1-216-855-11	METAL CHIP	680K	5%	1/10W	R3348	1-216-864-11	SHORT CHIP			
R3073	1-216-855-11	METAL CHIP	680K	5%	1/10W	R3349	1-218-687-11	METAL CHIP	620	0.50%	1/10W
R3074	1-218-704-11	METAL CHIP	3.3K	0.50%	1/10W	R3350	1-216-814-11	METAL CHIP	270	5%	1/10W
R3075	1-216-801-11	METAL CHIP	22	5%	1/10W	R3351	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3076	1-216-864-11	SHORT CHIP				R3352	1-216-853-11	METAL CHIP	470K	5%	1/10W
R3077	1-216-841-11	METAL CHIP	47K	5%	1/10W	R3353	1-216-837-11	METAL CHIP	22K	5%	1/10W
R3078	1-216-815-11	METAL CHIP	330	5%	1/10W	R3354	1-216-813-11	METAL CHIP	220	5%	1/10W
R3079	1-216-815-11	METAL CHIP	330	5%	1/10W	R3355	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3089	1-216-864-11	SHORT CHIP				R3357	1-218-676-11	METAL CHIP	220	0.50%	1/10W
R3091	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3358	1-218-676-11	METAL CHIP	220	0.50%	1/10W
R3092	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3359	1-218-676-11	METAL CHIP	220	0.50%	1/10W
R3093	1-216-864-11	SHORT CHIP				R3360	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R3095	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3364	1-216-864-11	SHORT CHIP			
R3096	1-216-817-11	METAL CHIP	470	5%	1/10W	R3365	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R3097	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3366	1-216-864-11	SHORT CHIP			
R3098	1-216-805-11	METAL CHIP	47	5%	1/10W	R3367	1-216-805-11	METAL CHIP	47	5%	1/10W
R3099	1-216-805-11	METAL CHIP	47	5%	1/10W	R3369	1-216-864-11	SHORT CHIP			
R3100	1-216-809-11	METAL CHIP	100	5%	1/10W	R3370	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3101	1-216-809-11	METAL CHIP	100	5%	1/10W	R3371	1-218-686-11	METAL CHIP	560	0.50%	1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3372	1-216-817-11	METAL CHIP	470	5%	1/10W	R3441	1-216-809-11	METAL CHIP	100	5%	1/10W
R3373	1-216-817-11	METAL CHIP	470	5%	1/10W	R3442	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3374	1-216-809-11	METAL CHIP	100	5%	1/10W	R3445	1-216-864-11	SHORT CHIP			
R3375	1-218-686-11	METAL CHIP	560	0.50%	1/10W	R3446	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3376	1-218-710-11	METAL CHIP	5.6K	0.50%	1/10W	R3447	1-216-819-11	METAL CHIP	680	5%	1/10W
R3377	1-216-817-11	METAL CHIP	470	5%	1/10W	R3448	1-216-855-11	METAL CHIP	680K	5%	1/10W
R3378	1-216-817-11	METAL CHIP	470	5%	1/10W	R3451	1-216-809-11	METAL CHIP	100	5%	1/10W
R3379	1-216-809-11	METAL CHIP	100	5%	1/10W	R3452	1-216-864-11	SHORT CHIP			
R3380	1-218-686-11	METAL CHIP	560	0.50%	1/10W	R3454	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3381	1-218-710-11	METAL CHIP	5.6K	0.50%	1/10W	R3457	1-216-813-11	METAL CHIP	220	5%	1/10W
R3382	1-216-864-11	SHORT CHIP				R3460	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3383	1-216-817-11	METAL CHIP	470	5%	1/10W	R3461	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3384	1-216-864-11	SHORT CHIP				R3464	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3385	1-216-864-11	SHORT CHIP				R3465	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3386	1-216-864-11	SHORT CHIP				R3466	1-216-813-11	METAL CHIP	220	5%	1/10W
R3387	1-216-864-11	SHORT CHIP				R3467	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3388	1-216-864-11	SHORT CHIP				R3468	1-216-864-11	SHORT CHIP			
R3389	1-216-864-11	SHORT CHIP				R3469	1-216-864-11	SHORT CHIP			
R3390	1-216-864-11	SHORT CHIP				R3470	1-216-809-11	METAL CHIP	100	5%	1/10W
R3391	1-216-864-11	SHORT CHIP				R3471	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3392	1-216-864-11	SHORT CHIP				R3472	1-216-801-11	METAL CHIP	22	5%	1/10W
R3393	1-216-864-11	SHORT CHIP				R3473	1-216-864-11	SHORT CHIP			
R3394	1-216-864-11	SHORT CHIP				R3475	1-216-809-11	METAL CHIP	100	5%	1/10W
R3400	1-216-864-11	SHORT CHIP				R3476	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3401	1-216-864-11	SHORT CHIP				R3477	1-216-809-11	METAL CHIP	100	5%	1/10W
R3406	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3478	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3407	1-216-864-11	SHORT CHIP				R3480	1-216-809-11	METAL CHIP	100	5%	1/10W
R3409	1-216-864-11	SHORT CHIP				R3483	1-216-809-11	METAL CHIP	100	5%	1/10W
R3410	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3484	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3411	1-216-797-11	METAL CHIP	10	5%	1/10W	R3485	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3421	1-216-864-11	SHORT CHIP				R3486	1-216-801-11	METAL CHIP	22	5%	1/10W
R3422	1-216-864-11	SHORT CHIP				R3489	1-216-864-11	SHORT CHIP			
R3423	1-216-813-11	METAL CHIP	220	5%	1/10W	R3490	1-216-864-11	SHORT CHIP			
R3426	1-216-809-11	METAL CHIP	100	5%	1/10W	R3491	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3428	1-469-094-21	FERRITE	0μH			R3492	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3429	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	R3493	1-216-809-11	METAL CHIP	100	5%	1/10W
R3432	1-216-815-11	METAL CHIP	330	5%	1/10W	R3494	1-216-813-11	METAL CHIP	220	5%	1/10W
R3434	1-216-809-11	METAL CHIP	100	5%	1/10W	R3495	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3435	1-216-809-11	METAL CHIP	100	5%	1/10W	R3496	1-216-801-11	METAL CHIP	22	5%	1/10W
R3436	1-216-809-11	METAL CHIP	100	5%	1/10W	R3497	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3437	1-216-809-11	METAL CHIP	100	5%	1/10W	R3498	1-216-818-11	METAL CHIP	560	5%	1/10W
R3438	1-216-809-11	METAL CHIP	100	5%	1/10W	R3499	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3439	1-216-809-11	METAL CHIP	100	5%	1/10W	R3501	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3440	1-216-809-11	METAL CHIP	100	5%	1/10W	R3502	1-216-821-11	METAL CHIP	1K	5%	1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3503	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3835	1-218-678-11	METAL CHIP	270	0.50%	1/10W
R3504	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3836	1-218-678-11	METAL CHIP	270	0.50%	1/10W
R3505	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3837	1-218-678-11	METAL CHIP	270	0.50%	1/10W
R3506	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3838	1-218-678-11	METAL CHIP	270	0.50%	1/10W
R3507	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3839	1-218-670-11	METAL CHIP	120	0.50%	1/10W
R3508	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3840	1-216-805-11	METAL CHIP	47	5%	1/10W
R3509	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3841	1-218-670-11	METAL CHIP	120	0.50%	1/10W
R3510	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3842	1-218-689-11	METAL CHIP	750	0.50%	1/10W
R3511	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3846	1-216-801-11	METAL CHIP	22	5%	1/10W
R3512	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3847	1-216-801-11	METAL CHIP	22	5%	1/10W
R3533	1-216-809-11	METAL CHIP	100	5%	1/10W	R3848	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3535	1-216-809-11	METAL CHIP	100	5%	1/10W	R3849	1-218-675-11	METAL CHIP	200	0.50%	1/10W
R3536	1-216-864-11	SHORT CHIP				R3850	1-218-675-11	METAL CHIP	200	0.50%	1/10W
R3537	1-216-864-11	SHORT CHIP				R3851	1-216-809-11	METAL CHIP	100	5%	1/10W
R3800	1-216-864-11	SHORT CHIP				R3852	1-218-675-11	METAL CHIP	200	0.50%	1/10W
R3802	1-218-678-11	METAL CHIP	270	0.50%	1/10W	R3854	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3803	1-218-678-11	METAL CHIP	270	0.50%	1/10W	R3857	1-216-809-11	METAL CHIP	100	5%	1/10W
R3804	1-218-678-11	METAL CHIP	270	0.50%	1/10W	R3858	1-218-704-11	METAL CHIP	3.3K	0.50%	1/10W
R3805	1-218-678-11	METAL CHIP	270	0.50%	1/10W	R3862	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3807	1-218-670-11	METAL CHIP	120	0.50%	1/10W	R3863	1-218-700-11	METAL CHIP	2.2K	0.50%	1/10W
R3808	1-218-670-11	METAL CHIP	120	0.50%	1/10W	R3864	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R3809	1-218-670-11	METAL CHIP	120	0.50%	1/10W	R3865	1-216-809-11	METAL CHIP	100	5%	1/10W
R3810	1-218-670-11	METAL CHIP	120	0.50%	1/10W	R3866	1-414-234-22	FERRITE	0μH		
R3811	1-216-809-11	METAL CHIP	100	5%	1/10W	R3867	1-414-234-22	FERRITE	0μH		
R3812	1-216-809-11	METAL CHIP	100	5%	1/10W	R3868	1-414-234-22	FERRITE	0μH		
R3813	1-216-809-11	METAL CHIP	100	5%	1/10W	R3881	1-216-807-11	METAL CHIP	68	5%	1/10W
R3814	1-218-644-11	METAL CHIP	10	0.50%	1/10W	R3882	1-216-807-11	METAL CHIP	68	5%	1/10W
R3815	1-218-648-11	METAL CHIP	15	0.50%	1/10W	R3883	1-216-807-11	METAL CHIP	68	5%	1/10W
R3816	1-218-652-11	METAL CHIP	22	0.50%	1/10W	R3911	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3817	1-218-652-11	METAL CHIP	22	0.50%	1/10W	R3933	1-216-864-11	SHORT CHIP			
R3820	1-218-684-11	METAL CHIP	470	0.50%	1/10W	R3937	1-216-809-11	METAL CHIP	100	5%	1/10W
R3821	1-218-684-11	METAL CHIP	470	0.50%	1/10W	R3953	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3822	1-218-684-11	METAL CHIP	470	0.50%	1/10W	R3954	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3823	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	R3955	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3824	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	R3956	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3825	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	R3957	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3826	1-216-809-11	METAL CHIP	100	5%	1/10W	R3958	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3828	1-218-682-11	METAL CHIP	390	0.50%	1/10W	R3975	1-216-864-11	SHORT CHIP			
R3829	1-218-682-11	METAL CHIP	390	0.50%	1/10W	R3976	1-216-864-11	SHORT CHIP			
R3830	1-218-682-11	METAL CHIP	390	0.50%	1/10W	R3977	1-216-864-11	SHORT CHIP			
R3831	1-216-864-11	SHORT CHIP				R3978	1-216-864-11	SHORT CHIP			
R3832	1-216-864-11	SHORT CHIP				R3979	1-216-864-11	SHORT CHIP			
R3833	1-216-864-11	SHORT CHIP				R3980	1-216-864-11	SHORT CHIP			
R3834	1-218-678-11	METAL CHIP	270	0.50%	1/10W	R3981	1-216-864-11	SHORT CHIP			



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3982	1-216-864-11	SHORT CHIP				CRYSTAL					
R3983	1-216-864-11	SHORT CHIP				X2801	1-760-895-21	VIBRATOR, CERAMIC			
R3984	1-218-644-11	METAL CHIP	10	0.50%	1/10W	X3089	1-781-945-21	VIBRATOR, CERAMIC			
R3985	1-218-644-11	METAL CHIP	10	0.50%	1/10W	X3401	1-781-887-21	VIBRATOR, CRYSTAL			
R3986	1-218-644-11	METAL CHIP	10	0.50%	1/10W	<div>MY</div>					
RESISTOR BRIDGE						* A-1302-937-A MY BOARD, COMPLETE					
						Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.					
						Data is provided for reference only.					
RB3001	1-239-409-11	NETWORK RESISTOR(CHIP)	47			CAPACITOR					
RB3002	1-239-409-11	NETWORK RESISTOR(CHIP)	47			C2017	1-126-964-11	ELECT	10µF	20%	50V
RB3003	1-239-409-11	NETWORK RESISTOR(CHIP)	47			C2019	1-126-964-11	ELECT	10µF	20%	50V
RB3004	1-239-409-11	NETWORK RESISTOR(CHIP)	47			C2020	1-126-964-11	ELECT	10µF	20%	50V
RB3011	1-239-409-11	NETWORK RESISTOR(CHIP)	47			C2022	1-126-964-11	ELECT	10µF	20%	50V
						C2027	1-126-964-11	ELECT	10µF	20%	50V
RB3013	1-239-409-11	NETWORK RESISTOR(CHIP)	47								
RB3014	1-239-409-11	NETWORK RESISTOR(CHIP)	47			C2029	1-126-964-11	ELECT	10µF	20%	50V
RB3015	1-239-409-11	NETWORK RESISTOR(CHIP)	47			C2038	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
RB3304	1-233-576-11	RES, CHIP NETWORK	100	(3216)		C2039	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
RB3305	1-233-576-11	RES, CHIP NETWORK	100	(3216)		C2040	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
						C2041	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
RB3306	1-233-576-11	RES, CHIP NETWORK	100	(3216)							
RB3307	1-233-576-11	RES, CHIP NETWORK	100	(3216)		C2042	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
RB3401	1-234-524-21	RES, CHIP NETWORK	33	(3216)		C2043	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
RB3402	1-234-524-21	RES, CHIP NETWORK	33	(3216)		C2044	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
RB3403	1-234-524-21	RES, CHIP NETWORK	33	(3216)		C2045	1-126-933-11	ELECT	100µF	20%	16V
						C2046	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
RB3404	1-234-524-21	RES, CHIP NETWORK	33	(3216)							
RB3405	1-234-524-21	RES, CHIP NETWORK	33	(3216)		C2050	1-164-156-11	CERAMIC CHIP	0.1µF		25V
RB3406	1-234-524-21	RES, CHIP NETWORK	33	(3216)		C2058	1-126-963-11	ELECT	4.7µF	20%	50V
RB3407	1-239-409-11	NETWORK RESISTOR(CHIP)	47			C2059	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
RB3408	1-239-409-11	NETWORK RESISTOR(CHIP)	47			C2060	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
						C2061	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
RB3409	1-239-409-11	NETWORK RESISTOR(CHIP)	47								
RB3410	1-239-409-11	NETWORK RESISTOR(CHIP)	47			C2062	1-164-156-11	CERAMIC CHIP	0.1µF		25V
RB3411	1-239-409-11	NETWORK RESISTOR(CHIP)	47			C2064	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
RB3412	1-239-409-11	NETWORK RESISTOR(CHIP)	47			C2065	1-126-933-11	ELECT	100µF	20%	16V
RB3421	1-233-576-11	RES, CHIP NETWORK	100	(3216)		C2066	1-164-156-11	CERAMIC CHIP	0.1µF		25V
						C2067	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
RB3422	1-233-576-11	RES, CHIP NETWORK	100	(3216)							
RB3423	1-233-576-11	RES, CHIP NETWORK	100	(3216)		C2069	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
RB3424	1-233-576-11	RES, CHIP NETWORK	100	(3216)		C2071	1-126-963-11	ELECT	4.7µF	20%	50V
RB3425	1-233-576-11	RES, CHIP NETWORK	100	(3216)		C2072	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
RB3426	1-233-576-11	RES, CHIP NETWORK	100	(3216)		C2075	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
						C2077	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
RB3427	1-233-576-11	RES, CHIP NETWORK	100	(3216)							
RB3428	1-233-576-11	RES, CHIP NETWORK	100	(3216)							
RB3436	1-234-523-21	RES, CHIP NETWORK	0	(3216)							
RB3437	1-234-523-21	RES, CHIP NETWORK	0	(3216)							
RB3438	1-234-523-21	RES, CHIP NETWORK	0	(3216)							
RB3439	1-234-523-21	RES, CHIP NETWORK	0	(3216)							



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C2082	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C2218	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2085	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C2219	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2088	1-216-864-11	SHORT CHIP				C2220	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2089	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2221	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C2090	1-216-864-11	SHORT CHIP				C2222	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C2091	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	C2223	1-165-908-11	CERAMIC CHIP	1μF	10%	10V
C2096	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C2224	1-115-156-11	CERAMIC CHIP	1μF		10V
C2097	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C2225	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C2098	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	C2226	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2099	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	C2227	1-126-933-11	ELECT	100μF	20%	16V
C2100	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C2228	1-162-913-11	CERAMIC CHIP	8pF	0.50pF	50V
C2103	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C2229	1-162-913-11	CERAMIC CHIP	8pF	0.50pF	50V
C2106	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2230	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C2107	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2231	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C2108	1-126-933-11	ELECT	100μF	20%	16V	C2232	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2109	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	C2233	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2110	1-162-919-11	CERAMIC CHIP	22pF	5%	50V	C2234	1-126-933-11	ELECT	100μF	20%	16V
C2115	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2235	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2116	1-126-933-11	ELECT	100μF	20%	16V	C2236	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2117	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2237	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C2122	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C2238	1-126-933-11	ELECT	100μF	20%	16V
C2123	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	C2239	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2124	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2240	1-126-933-11	ELECT	100μF	20%	16V
C2126	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C2241	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2130	1-126-933-11	ELECT	100μF	20%	16V	C2242	1-126-934-11	ELECT	220μF	20%	16V
C2131	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2243	1-126-934-11	ELECT	220μF	20%	16V
C2132	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2244	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2200	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2245	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2201	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2246	1-126-947-11	ELECT	47μF	20%	35V
C2202	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2247	1-162-975-11	CERAMIC CHIP	24pF	5%	50V
C2204	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2248	1-162-975-11	CERAMIC CHIP	24pF	5%	50V
C2205	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2249	1-164-360-11	CERAMIC CHIP	0.1μF		16V
C2206	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2250	1-164-360-11	CERAMIC CHIP	0.1μF		16V
C2207	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2251	1-164-392-11	CERAMIC CHIP	390pF	5%	50V
C2208	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2300	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V
C2209	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2301	1-126-933-11	ELECT	100μF	20%	16V
C2210	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2302	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2211	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2305	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2212	1-126-933-11	ELECT	100μF	20%	16V	C2306	1-162-920-11	CERAMIC CHIP	27pF	5%	50V
C2213	1-126-947-11	ELECT	47μF	20%	35V	C2307	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C2214	1-126-933-11	ELECT	100μF	20%	16V	C2308	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2215	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2309	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2216	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2310	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C2217	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2311	1-164-156-11	CERAMIC CHIP	0.1μF		25V



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C2312	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V	C2524	1-135-834-91	CERAMIC CHIP	2.2μF	6.3V	
C2313	1-115-156-11	CERAMIC CHIP	1μF		10V	C2525	1-135-834-91	CERAMIC CHIP	2.2μF	6.3V	
C2315	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2527	1-135-834-91	CERAMIC CHIP	2.2μF	6.3V	
C2317	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2528	1-162-962-11	CERAMIC CHIP	470pF	10%	50V
C2318	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2530	1-126-947-11	ELECT	47μF	20%	35V
C2319	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2532	1-135-834-91	CERAMIC CHIP	2.2μF		6.3V
C2349	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V	C2533	1-162-960-11	CERAMIC CHIP	220pF	10%	50V
C2352	1-126-933-11	ELECT	100μF	20%	16V	C2534	1-126-947-11	ELECT	47μF	20%	35V
C2353	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2535	1-162-962-11	CERAMIC CHIP	470pF	10%	50V
C2354	1-162-907-11	CERAMIC CHIP	2pF	0.25pF	50V	C2536	1-135-834-91	CERAMIC CHIP	2.2μF		6.3V
C2355	1-164-245-11	CERAMIC CHIP	0.015μF	10%	25V	C2538	1-126-947-11	ELECT	47μF	20%	35V
C2358	1-104-655-91	ELECT	470μF	20%	6.3V	C2539	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2359	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2540	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C2361	1-126-933-11	ELECT	100μF	20%	16V	C2541	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C2362	1-126-933-11	ELECT	100μF	20%	16V	C2542	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2364	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2543	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2366	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2544	1-126-963-11	ELECT	4.7μF	20%	50V
C2369	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V	C2545	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2370	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2546	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2371	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V	C2548	1-126-947-11	ELECT	47μF	20%	35V
C2372	1-162-960-11	CERAMIC CHIP	220pF	10%	50V	C2549	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2373	1-135-834-91	CERAMIC CHIP	2.2μF		6.3V	C2550	1-126-963-11	ELECT	4.7μF	20%	50V
C2374	1-162-960-11	CERAMIC CHIP	220pF	10%	50V	C2551	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2375	1-135-834-91	CERAMIC CHIP	2.2μF		6.3V	C2553	1-126-947-11	ELECT	47μF	20%	35V
C2376	1-162-963-11	CERAMIC CHIP	680pF	10%	50V	C2554	1-126-947-11	ELECT	47μF	20%	35V
C2500	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V	C2558	1-126-963-11	ELECT	4.7μF	20%	50V
C2501	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V	C2559	1-126-933-11	ELECT	100μF	20%	16V
C2503	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C2560	1-126-947-11	ELECT	47μF	20%	35V
C2504	1-126-933-11	ELECT	100μF	20%	16V	C2561	1-126-963-11	ELECT	4.7μF	20%	50V
C2506	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2563	1-126-961-11	ELECT	2.2μF	20%	50V
C2508	1-126-933-11	ELECT	100μF	20%	16V	C2564	1-126-961-11	ELECT	2.2μF	20%	50V
C2510	1-162-960-11	CERAMIC CHIP	220pF	10%	50V	C2565	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C2512	1-135-834-91	CERAMIC CHIP	2.2μF		6.3V	C2566	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2513	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V	C2569	1-126-961-11	ELECT	2.2μF	20%	50V
C2514	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C2570	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2515	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C2571	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C2516	1-126-933-11	ELECT	100μF	20%	16V	C2572	1-126-960-11	ELECT	1μF	20%	50V
C2517	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V	C2574	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C2518	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V	C2575	1-126-960-11	ELECT	1μF	20%	50V
C2519	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C2579	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C2520	1-162-960-11	CERAMIC CHIP	220pF	10%	50V	C2582	1-126-933-11	ELECT	100μF	20%	16V
C2521	1-162-960-11	CERAMIC CHIP	220pF	10%	50V	C2584	1-126-933-11	ELECT	100μF	20%	16V
C2522	1-126-947-11	ELECT	47μF	20%	35V	C2585	1-135-834-91	CERAMIC CHIP	2.2μF		6.3V
C2523	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C2586	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
C2587	1-135-834-91	CERAMIC CHIP	2.2μF 6.3V	<u>FILTER</u>			
C2588	1-162-964-11	CERAMIC CHIP	0.001μF 10% 50V	FL2201	1-239-848-21	FILTER, LOW PASS	
<u>CONNECTOR</u>				FL2202	1-239-848-21	FILTER, LOW PASS	
CN2003	1-784-650-21	CONNECTOR	2P	FL2203	1-239-848-21	FILTER, LOW PASS	
CN2004	1-785-946-21	CONNECTOR	3P	FL2204	1-239-848-21	FILTER, LOW PASS	
CN2006	1-793-174-11	SOCKET,PC CONNECTOR (PC BOARD)		FL2205	1-409-755-11	FERRITE	0μH
* CN2301	1-764-333-11	PIN, CONNECTOR(PCB)(V TYPE)	10P	FL2206	1-409-755-11	FERRITE	0μH
* CN2304	1-564-595-11	PLUG, CONNECTOR	14P	FL2207	1-409-755-11	FERRITE	0μH
CN2305	1-770-721-11	CONNECTOR, BOARD TO BOARD	4P	<u>IC</u>			
<u>DIODE</u>				IC2004	8-752-102-21	IC	CXA2103AQ
D2310	8-719-083-57	DIODE	UDZSTE-173.6B	IC2006	8-752-108-35	IC	CXA2171AQ
D2500	8-719-404-50	DIODE	MA111-TX	IC2010	8-759-549-07	IC	SN74LV157APWR
D2501	8-719-404-50	DIODE	MA111-TX	IC2200	6-700-960-01	IC	UPD64083GF-3BA
D2502	8-719-404-50	DIODE	MA111-TX	IC2201	6-700-399-01	IC	UPC2925T-E1
D2503	8-719-404-50	DIODE	MA111-TX	IC2300	6-804-283-01	IC	M306V7MG-078FPU0
D2504	8-719-404-50	DIODE	MA111-TX	IC2301	6-801-375-01	IC	PST9129NL
D2505	8-719-978-33	DIODE	DTZ-TT11-6.8B	IC2302	6-704-573-01	IC	M24C32-WMN6T(B)
D2506	8-719-978-33	DIODE	DTZ-TT11-6.8B	IC2305	8-759-641-26	IC	NJM2391DL1-33(TE1)
D2507	8-719-404-50	DIODE	MA111-TX	IC2500	8-759-394-57	IC	PST593C-MMP-4P
<u>FERRITE BEAD</u>				IC2501	6-801-750-01	IC	TC94A04F-014
FB2200	1-414-229-11	FERRITE	0μH	IC2502	8-759-331-71	IC	NJM4558E(TE2)
FB2501	1-216-864-11	SHORT CHIP		<u>COIL</u>			
FB2503	1-216-864-11	SHORT CHIP		L2005	1-469-555-21	INDUCTOR	10μH
FB2504	1-216-864-11	SHORT CHIP		L2007	1-469-555-21	INDUCTOR	10μH
FB2505	1-414-229-11	FERRITE	0μH	L2009	1-469-555-21	INDUCTOR	10μH
FB2507	1-414-229-11	FERRITE	0μH	L2011	1-469-555-21	INDUCTOR	10μH
FB2508	1-414-229-11	FERRITE	0μH	L2012	1-469-555-21	INDUCTOR	10μH
FB2509	1-216-864-11	SHORT CHIP		L2013	1-469-555-21	INDUCTOR	10μH
FB2510	1-414-229-11	FERRITE	0μH	L2200	1-469-555-21	INDUCTOR	10μH
FB2511	1-216-864-11	SHORT CHIP		L2201	1-469-555-21	INDUCTOR	10μH
FB2512	1-414-229-11	FERRITE	0μH	L2202	1-469-555-21	INDUCTOR	10μH
FB2513	1-216-864-11	SHORT CHIP		L2203	1-216-001-00	RES-CHIP	10 5% 1/10W
FB2514	1-216-864-11	SHORT CHIP		L2204	1-469-555-21	INDUCTOR	10μH
FB2515	1-414-229-11	FERRITE	0μH	L2205	1-216-001-00	RES-CHIP	10 5% 1/10W
FB2516	1-414-229-11	FERRITE	0μH	L2206	1-469-555-21	INDUCTOR	10μH
FB2517	1-414-229-11	FERRITE	0μH	L2207	1-469-553-21	INDUCTOR	4.7μH
FB2518	1-414-229-11	FERRITE	0μH	L2501	1-412-537-31	INDUCTOR	100μH
FB2519	1-414-229-11	FERRITE	0μH	L2502	1-216-295-91	SHORT CHIP	
FB2520	1-216-864-11	SHORT CHIP					
FB2521	1-216-864-11	SHORT CHIP					
FB2522	1-414-229-11	FERRITE	0μH				



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
TRANSISTOR				Q2510	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2009	8-729-422-27	TRANSISTOR	2SD601A-Q	Q2511	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2013	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	Q2512	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2016	8-729-422-27	TRANSISTOR	2SD601A-Q	Q2513	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2200	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	RESISTOR			
Q2201	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	R2036	1-216-837-11	METAL CHIP	22K 5% 1/10W
Q2202	8-729-422-27	TRANSISTOR	2SD601A-Q	R2037	1-216-864-11	SHORT CHIP	
Q2203	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	R2038	1-216-864-11	SHORT CHIP	
Q2204	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	R2039	1-216-864-11	SHORT CHIP	
Q2205	8-729-422-27	TRANSISTOR	2SD601A-Q	R2041	1-216-837-11	METAL CHIP	22K 5% 1/10W
Q2206	8-729-422-27	TRANSISTOR	2SD601A-Q	R2042	1-216-864-11	SHORT CHIP	
Q2207	8-729-422-27	TRANSISTOR	2SD601A-Q	R2043	1-216-864-11	SHORT CHIP	
Q2208	8-729-422-27	TRANSISTOR	2SD601A-Q	R2044	1-216-864-11	SHORT CHIP	
Q2209	8-729-422-27	TRANSISTOR	2SD601A-Q	R2052	1-216-835-11	METAL CHIP	15K 5% 1/10W
Q2210	8-729-422-27	TRANSISTOR	2SD601A-Q	R2053	1-216-864-11	SHORT CHIP	
Q2211	8-729-422-27	TRANSISTOR	2SD601A-Q	R2055	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q2212	8-729-422-27	TRANSISTOR	2SD601A-Q	R2056	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2213	8-729-422-27	TRANSISTOR	2SD601A-Q	R2057	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2214	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	R2061	1-216-828-11	METAL CHIP	3.9K 5% 1/10W
Q2215	8-729-422-27	TRANSISTOR	2SD601A-Q	R2067	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2216	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	R2069	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2301	8-729-422-27	TRANSISTOR	2SD601A-Q	R2074	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q2303	8-729-422-27	TRANSISTOR	2SD601A-Q	R2076	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2304	8-729-422-27	TRANSISTOR	2SD601A-Q	R2078	1-216-864-11	SHORT CHIP	
Q2312	8-729-422-27	TRANSISTOR	2SD601A-Q	R2079	1-216-864-11	SHORT CHIP	
Q2313	8-729-422-27	TRANSISTOR	2SD601A-Q	R2081	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2314	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	R2082	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2315	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	R2083	1-216-851-11	METAL CHIP	330K 5% 1/10W
Q2316	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	R2094	1-218-716-11	METAL CHIP	10K 0.50% 1/10W
Q2320	8-729-422-27	TRANSISTOR	2SD601A-Q	R2095	1-216-864-11	SHORT CHIP	
Q2321	8-729-422-27	TRANSISTOR	2SD601A-Q	R2097	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2322	8-729-422-27	TRANSISTOR	2SD601A-Q	R2101	1-216-821-11	METAL CHIP	1K 5% 1/10W
Q2324	8-729-422-27	TRANSISTOR	2SD601A-Q	R2102	1-216-864-11	SHORT CHIP	
Q2500	8-729-422-27	TRANSISTOR	2SD601A-Q	R2103	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2501	8-729-422-27	TRANSISTOR	2SD601A-Q	R2104	1-216-864-11	SHORT CHIP	
Q2502	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	R2107	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2503	8-729-422-27	TRANSISTOR	2SD601A-Q	R2114	1-216-805-11	METAL CHIP	47 5% 1/10W
Q2504	8-729-422-27	TRANSISTOR	2SD601A-Q	R2115	1-216-805-11	METAL CHIP	47 5% 1/10W
Q2505	8-729-422-27	TRANSISTOR	2SD601A-Q	R2116	1-216-805-11	METAL CHIP	47 5% 1/10W
Q2506	8-729-422-27	TRANSISTOR	2SD601A-Q	R2117	1-216-864-11	SHORT CHIP	
Q2507	8-729-422-27	TRANSISTOR	2SD601A-Q	R2118	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2508	8-729-422-27	TRANSISTOR	2SD601A-Q	R2119	1-216-809-11	METAL CHIP	100 5% 1/10W
Q2509	8-729-422-27	TRANSISTOR	2SD601A-Q	R2126	1-216-809-11	METAL CHIP	100 5% 1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2127	1-216-864-11	SHORT CHIP				R2228	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2128	1-216-864-11	SHORT CHIP				R2229	1-216-849-11	METAL CHIP	220K	5%	1/10W
R2130	1-216-864-11	SHORT CHIP				R2230	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2131	1-216-809-11	METAL CHIP	100	5%	1/10W	R2231	1-216-819-11	METAL CHIP	680	5%	1/10W
R2133	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R2232	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2134	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R2233	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2135	1-216-864-11	SHORT CHIP				R2234	1-216-820-11	METAL CHIP	820	5%	1/10W
R2137	1-216-864-11	SHORT CHIP				R2235	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R2138	1-216-864-11	SHORT CHIP				R2236	1-216-813-11	METAL CHIP	220	5%	1/10W
R2139	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R2237	1-216-820-11	METAL CHIP	820	5%	1/10W
R2140	1-216-864-11	SHORT CHIP				R2238	1-216-819-11	METAL CHIP	680	5%	1/10W
R2141	1-216-864-11	SHORT CHIP				R2239	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2142	1-216-864-11	SHORT CHIP				R2240	1-216-834-11	METAL CHIP	12K	5%	1/10W
R2143	1-216-864-11	SHORT CHIP				R2241	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2144	1-216-864-11	SHORT CHIP				R2242	1-218-680-11	METAL CHIP	330	0.50%	1/10W
R2145	1-216-864-11	SHORT CHIP				R2243	1-216-834-11	METAL CHIP	12K	5%	1/10W
R2146	1-216-864-11	SHORT CHIP				R2244	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2201	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2245	1-218-684-11	METAL CHIP	470	0.50%	1/10W
R2202	1-216-809-11	METAL CHIP	100	5%	1/10W	R2246	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2203	1-216-809-11	METAL CHIP	100	5%	1/10W	R2247	1-216-805-11	METAL CHIP	47	5%	1/10W
R2204	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2248	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2205	1-216-864-11	SHORT CHIP				R2249	1-216-805-11	METAL CHIP	47	5%	1/10W
R2206	1-216-864-11	SHORT CHIP				R2250	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R2207	1-216-809-11	METAL CHIP	100	5%	1/10W	R2251	1-216-818-11	METAL CHIP	560	5%	1/10W
R2208	1-216-809-11	METAL CHIP	100	5%	1/10W	R2252	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2209	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2253	1-216-809-11	METAL CHIP	100	5%	1/10W
R2210	1-216-818-11	METAL CHIP	560	5%	1/10W	R2254	1-216-817-11	METAL CHIP	470	5%	1/10W
R2211	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2255	1-216-817-11	METAL CHIP	470	5%	1/10W
R2212	1-216-818-11	METAL CHIP	560	5%	1/10W	R2256	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2213	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2257	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2214	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2298	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2215	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	R2299	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2216	1-216-817-11	METAL CHIP	470	5%	1/10W	R2300	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2217	1-216-817-11	METAL CHIP	470	5%	1/10W	R2301	1-216-809-11	METAL CHIP	100	5%	1/10W
R2218	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	R2302	1-216-809-11	METAL CHIP	100	5%	1/10W
R2219	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	R2303	1-216-809-11	METAL CHIP	100	5%	1/10W
R2220	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2304	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2221	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R2305	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2222	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2306	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2223	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R2307	1-216-809-11	METAL CHIP	100	5%	1/10W
R2224	1-216-809-11	METAL CHIP	100	5%	1/10W	R2308	1-216-809-11	METAL CHIP	100	5%	1/10W
R2225	1-216-818-11	METAL CHIP	560	5%	1/10W	R2311	1-216-809-11	METAL CHIP	100	5%	1/10W
R2226	1-216-817-11	METAL CHIP	470	5%	1/10W	R2312	1-216-809-11	METAL CHIP	100	5%	1/10W
R2227	1-216-816-11	METAL CHIP	390	5%	1/10W	R2313	1-216-809-11	METAL CHIP	100	5%	1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2314	1-216-809-11	METAL CHIP	100	5%	1/10W	R2365	1-216-809-11	METAL CHIP	100	5%	1/10W
R2315	1-216-809-11	METAL CHIP	100	5%	1/10W	R2366	1-216-864-11	SHORT CHIP			
R2316	1-216-809-11	METAL CHIP	100	5%	1/10W	R2367	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2317	1-216-809-11	METAL CHIP	100	5%	1/10W	R2368	1-216-809-11	METAL CHIP	100	5%	1/10W
R2318	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2369	1-216-805-11	METAL CHIP	47	5%	1/10W
R2319	1-216-809-11	METAL CHIP	100	5%	1/10W	R2370	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2321	1-216-809-11	METAL CHIP	100	5%	1/10W	R2371	1-216-809-11	METAL CHIP	100	5%	1/10W
R2322	1-216-809-11	METAL CHIP	100	5%	1/10W	R2372	1-216-809-11	METAL CHIP	100	5%	1/10W
R2323	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2373	1-216-809-11	METAL CHIP	100	5%	1/10W
R2324	1-216-809-11	METAL CHIP	100	5%	1/10W	R2374	1-216-864-11	SHORT CHIP			
R2325	1-216-864-11	SHORT CHIP				R2375	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2326	1-216-809-11	METAL CHIP	100	5%	1/10W	R2376	1-216-805-11	METAL CHIP	47	5%	1/10W
R2327	1-216-809-11	METAL CHIP	100	5%	1/10W	R2377	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2328	1-216-809-11	METAL CHIP	100	5%	1/10W	R2378	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2329	1-216-815-11	METAL CHIP	330	5%	1/10W	R2379	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2330	1-216-817-11	METAL CHIP	470	5%	1/10W	R2380	1-216-809-11	METAL CHIP	100	5%	1/10W
R2333	1-216-809-11	METAL CHIP	100	5%	1/10W	R2381	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2335	1-216-820-11	METAL CHIP	820	5%	1/10W	R2383	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2336	1-216-809-11	METAL CHIP	100	5%	1/10W	R2388	1-216-815-11	METAL CHIP	330	5%	1/10W
R2337	1-216-809-11	METAL CHIP	100	5%	1/10W	R2389	1-216-815-11	METAL CHIP	330	5%	1/10W
R2338	1-216-864-11	SHORT CHIP				R2390	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2339	1-216-809-11	METAL CHIP	100	5%	1/10W	R2450	1-216-864-11	SHORT CHIP			
R2341	1-216-809-11	METAL CHIP	100	5%	1/10W	R2452	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2342	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2453	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2343	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2455	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2344	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2459	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2345	1-216-809-11	METAL CHIP	100	5%	1/10W	R2460	1-216-809-11	METAL CHIP	100	5%	1/10W
R2346	1-218-734-11	METAL CHIP	56K	0.50%	1/10W	R2464	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2347	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2466	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2348	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2467	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2350	1-216-809-11	METAL CHIP	100	5%	1/10W	R2469	1-216-809-11	METAL CHIP	100	5%	1/10W
R2351	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2471	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2352	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2480	1-216-845-11	METAL CHIP	100K	5%	1/10W
R2353	1-216-809-11	METAL CHIP	100	5%	1/10W	R2481	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2354	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2483	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2355	1-216-809-11	METAL CHIP	100	5%	1/10W	R2484	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2357	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2485	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2358	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2486	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2359	1-216-805-11	METAL CHIP	47	5%	1/10W	R2487	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2360	1-216-809-11	METAL CHIP	100	5%	1/10W	R2488	1-216-857-11	METAL CHIP	1M	5%	1/10W
R2361	1-216-864-11	SHORT CHIP				R2489	1-216-817-11	METAL CHIP	470	5%	1/10W
R2362	1-216-805-11	METAL CHIP	47	5%	1/10W	R2490	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2363	1-216-841-11	METAL CHIP	47K	5%	1/10W	R2493	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2364	1-216-809-11	METAL CHIP	100	5%	1/10W	R2494	1-216-821-11	METAL CHIP	1K	5%	1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2500	1-216-809-11	METAL CHIP	100	5%	1/10W	R2551	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2501	1-216-839-11	METAL CHIP	33K	5%	1/10W	R2552	1-216-809-11	METAL CHIP	100	5%	1/10W
R2502	1-216-864-11	SHORT CHIP				R2553	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2503	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2554	1-216-809-11	METAL CHIP	100	5%	1/10W
R2506	1-216-841-11	METAL CHIP	47K	5%	1/10W	R2555	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2508	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R2556	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2509	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2557	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2510	1-216-839-11	METAL CHIP	33K	5%	1/10W	R2558	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2511	1-216-839-11	METAL CHIP	33K	5%	1/10W	R2559	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2512	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2560	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2513	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R2561	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2514	1-216-841-11	METAL CHIP	47K	5%	1/10W	R2562	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2515	1-216-841-11	METAL CHIP	47K	5%	1/10W	R2563	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2516	1-216-839-11	METAL CHIP	33K	5%	1/10W	R2564	1-216-817-11	METAL CHIP	470	5%	1/10W
R2517	1-216-841-11	METAL CHIP	47K	5%	1/10W	R2565	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2518	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R2566	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2519	1-216-857-11	METAL CHIP	1M	5%	1/10W	R2567	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2520	1-216-864-11	SHORT CHIP				R2568	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2521	1-216-864-11	SHORT CHIP				R2569	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2522	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2570	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2523	1-216-813-11	METAL CHIP	220	5%	1/10W	R2571	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2524	1-216-809-11	METAL CHIP	100	5%	1/10W	R2572	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2525	1-216-813-11	METAL CHIP	220	5%	1/10W	R2573	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2526	1-216-864-11	SHORT CHIP				R2574	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2528	1-216-809-11	METAL CHIP	100	5%	1/10W	R2575	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2529	1-216-809-11	METAL CHIP	100	5%	1/10W	R2576	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2530	1-216-809-11	METAL CHIP	100	5%	1/10W	R2577	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2531	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2578	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2532	1-216-837-11	METAL CHIP	22K	5%	1/10W	R2579	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2533	1-216-864-11	SHORT CHIP				R2580	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2534	1-216-837-11	METAL CHIP	22K	5%	1/10W	R2581	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R2535	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2582	1-216-809-11	METAL CHIP	100	5%	1/10W
R2536	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2585	1-216-864-11	SHORT CHIP			
R2538	1-216-841-11	METAL CHIP	47K	5%	1/10W	R2593	1-216-864-11	SHORT CHIP			
R2539	1-216-841-11	METAL CHIP	47K	5%	1/10W	R2603	1-216-845-11	METAL CHIP	100K	5%	1/10W
R2540	1-216-864-11	SHORT CHIP				R2604	1-216-845-11	METAL CHIP	100K	5%	1/10W
R2541	1-216-864-11	SHORT CHIP				R2605	1-216-864-11	SHORT CHIP			
R2542	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2607	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2543	1-216-864-11	SHORT CHIP				R2608	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2546	1-216-813-11	METAL CHIP	220	5%	1/10W	R2609	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2547	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2610	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2548	1-216-841-11	METAL CHIP	47K	5%	1/10W	R2611	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2549	1-216-813-11	METAL CHIP	220	5%	1/10W	R2612	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2550	1-216-821-11	METAL CHIP	1K	5%	1/10W						



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
CRYSTAL						C9540	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V
X2001	1-567-505-11	OSCILLATOR, CRYSTAL				C9541	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
X2003	1-781-282-11	VIBRATOR, CERAMIC				C9542	1-126-394-11	ELECT CHIP	10μF	20%	16V
X2200	1-767-606-11	VIBRATOR, CRYSTAL				C9543	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
X2300	1-795-572-11	VIBRATOR, CRYSTAL				C9545	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
X2500	1-767-639-21	VIBRATOR, CRYSTAL				C9546	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
<div><div><div>P</div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div></div></div>											



*

A-1302-939-A P BOARD, COMPLETE

The P and PA Boards are interchangeable.

Either board can be used as a replacement.

Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.

Data is provided for reference only.

CAPACITOR

C9507	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C9508	1-126-394-11	ELECT CHIP	10μF	20%	16V
C9509	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C9510	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C9511	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C9513	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C9514	1-126-394-11	ELECT CHIP	10μF	20%	16V
C9515	1-126-394-11	ELECT CHIP	10μF	20%	16V
C9516	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C9517	1-126-394-11	ELECT CHIP	10μF	20%	16V
C9519	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V
C9521	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C9523	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C9524	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V
C9525	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V
C9526	1-126-394-11	ELECT CHIP	10μF	20%	16V
C9527	1-164-505-11	CERAMIC CHIP	2.2μF		16V
C9528	1-126-246-11	ELECT CHIP	220μF	20%	4V
C9529	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C9530	1-126-394-11	ELECT CHIP	10μF	20%	16V
C9531	1-126-394-11	ELECT CHIP	10μF	20%	16V
C9532	1-126-394-11	ELECT CHIP	10μF	20%	16V
C9533	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V
C9534	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V
C9535	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V
C9537	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C9538	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V

147

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9516	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R9582	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9517	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R9584	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9518	1-216-857-11	METAL CHIP	1M	5%	1/10W	R9585	1-216-809-11	METAL CHIP	100	5%	1/10W
R9519	1-216-803-11	METAL CHIP	33	5%	1/10W	R9586	1-216-809-11	METAL CHIP	100	5%	1/10W
R9520	1-216-816-11	METAL CHIP	390	5%	1/10W	R9592	1-216-809-11	METAL CHIP	100	5%	1/10W
R9526	1-218-716-11	METAL CHIP	10K	0.50%	1/10W	R9595	1-216-817-11	METAL CHIP	470	5%	1/10W
R9528	1-216-837-11	METAL CHIP	22K	5%	1/10W	R9597	1-216-803-11	METAL CHIP	33	5%	1/10W
R9529	1-216-850-11	METAL CHIP	270K	5%	1/10W	R9602	1-216-809-11	METAL CHIP	100	5%	1/10W
R9530	1-216-821-11	METAL CHIP	1K	5%	1/10W	R9606	1-216-864-11	SHORT CHIP			
R9531	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R9611	1-216-864-11	SHORT CHIP			
R9532	1-218-694-11	METAL CHIP	1.2K	0.50%	1/10W	R9612	1-216-864-11	SHORT CHIP			
R9533	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R9614	1-216-809-11	METAL CHIP	100	5%	1/10W
R9534	1-218-686-11	METAL CHIP	560	0.50%	1/10W	R9615	1-216-809-11	METAL CHIP	100	5%	1/10W
R9535	1-216-845-11	METAL CHIP	100K	5%	1/10W	R9616	1-216-809-11	METAL CHIP	100	5%	1/10W
R9538	1-218-823-11	METAL CHIP	100	0.50%	1/10W	R9623	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9539	1-216-821-11	METAL CHIP	1K	5%	1/10W	R9624	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9540	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R9625	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9541	1-218-694-11	METAL CHIP	1.2K	0.50%	1/10W	R9626	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9542	1-216-850-11	METAL CHIP	270K	5%	1/10W	R9627	1-216-809-11	METAL CHIP	100	5%	1/10W
R9543	1-218-686-11	METAL CHIP	560	0.50%	1/10W	R9850	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9544	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W	R9851	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9546	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W	R9852	1-218-644-11	METAL CHIP	10	0.50%	1/10W
R9547	1-216-845-11	METAL CHIP	100K	5%	1/10W	R9853	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9548	1-218-716-11	METAL CHIP	10K	0.50%	1/10W	R9854	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9552	1-216-817-11	METAL CHIP	470	5%	1/10W	R9860	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W
R9555	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W	R9864	1-218-701-11	METAL CHIP	2.4K	0.50%	1/10W
R9556	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R9866	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9557	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W	R9867	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9558	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R9868	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9559	1-216-809-11	METAL CHIP	100	5%	1/10W	R9869	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9560	1-216-864-11	SHORT CHIP				R9882	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9562	1-216-809-11	METAL CHIP	100	5%	1/10W	R9884	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9563	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W	R9885	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9564	1-216-837-11	METAL CHIP	22K	5%	1/10W	R9886	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9565	1-216-845-11	METAL CHIP	100K	5%	1/10W	R9887	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9566	1-216-864-11	SHORT CHIP				R9888	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R9569	1-216-845-11	METAL CHIP	100K	5%	1/10W	R9890	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9572	1-216-837-11	METAL CHIP	22K	5%	1/10W	R9891	1-216-809-11	METAL CHIP	100	5%	1/10W
R9574	1-216-809-11	METAL CHIP	100	5%	1/10W						
R9575	1-216-809-11	METAL CHIP	100	5%	1/10W						
R9576	1-216-857-11	METAL CHIP	1M	5%	1/10W						
R9577	1-216-857-11	METAL CHIP	1M	5%	1/10W						
R9580	1-216-809-11	METAL CHIP	100	5%	1/10W						
R9581	1-216-809-11	METAL CHIP	100	5%	1/10W						



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
RB9512	1-233-574-11	RES, CHIP NETWORK 10	(3216)	C9526	1-126-394-11	ELECT CHIP	10μF 20% 16V
RB9517	1-236-908-11	NETWORK RESISTOR(CHIP)	10K	C9527	1-164-505-11	CERAMIC CHIP	2.2μF 16V
VARISTOR				C9528	1-126-246-11	ELECT CHIP	220μF 20% 4V
VD9500	6-500-701-01	DIODE	PGB1010603NR	C9529	1-107-826-11	CERAMIC CHIP	0.1μF 10% 16V
VD9501	6-500-701-01	DIODE	PGB1010603NR	C9530	1-126-394-11	ELECT CHIP	10μF 20% 16V
VD9502	6-500-701-01	DIODE	PGB1010603NR	C9531	1-126-394-11	ELECT CHIP	10μF 20% 16V
VD9503	6-500-701-01	DIODE	PGB1010603NR	C9532	1-126-394-11	ELECT CHIP	10μF 20% 16V
VD9504	6-500-701-01	DIODE	PGB1010603NR	C9533	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V
VD9505	6-500-701-01	DIODE	PGB1010603NR	C9534	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V
VD9506	6-500-701-01	DIODE	PGB1010603NR	C9535	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V
VD9507	6-500-701-01	DIODE	PGB1010603NR	C9537	1-107-826-11	CERAMIC CHIP	0.1μF 10% 16V
VD9518	6-500-701-01	DIODE	PGB1010603NR	C9538	1-162-964-11	CERAMIC CHIP	0.001μF 10% 50V
VD9519	6-500-701-01	DIODE	PGB1010603NR	C9540	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V
CRYSTAL				C9541	1-107-826-11	CERAMIC CHIP	0.1μF 10% 16V
X9501	1-767-984-21	VIBRATOR, CRYSTAL		C9542	1-126-394-11	ELECT CHIP	10μF 20% 16V
PA				C9543	1-162-966-11	CERAMIC CHIP	0.0022μF 10% 50V
* A-1085-903-A PA BOARD, COMPLETE				C9545	1-162-966-11	CERAMIC CHIP	0.0022μF 10% 50V
The P and PA Boards are interchangeable.				C9546	1-164-230-11	CERAMIC CHIP	220pF 5% 50V
Either board can be used as a replacement.				C9547	1-107-826-11	CERAMIC CHIP	0.1μF 10% 16V
Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.				C9549	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V
Data is provided for reference only.				C9550	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V
CAPACITOR				C9551	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V
C9507	1-162-970-11	CERAMIC CHIP	0.01μF 10% 25V	C9552	1-126-246-11	ELECT CHIP	220μF 20% 4V
C9508	1-126-394-11	ELECT CHIP	10μF 20% 16V	C9553	1-162-966-11	CERAMIC CHIP	0.0022μF 10% 50V
C9509	1-162-966-11	CERAMIC CHIP	0.0022μF 10% 50V	C9554	1-126-394-11	ELECT CHIP	10μF 20% 16V
C9510	1-164-230-11	CERAMIC CHIP	220pF 5% 50V	C9555	1-126-394-11	ELECT CHIP	10μF 20% 16V
C9511	1-162-966-11	CERAMIC CHIP	0.0022μF 10% 50V	C9557	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V
C9513	1-162-966-11	CERAMIC CHIP	0.0022μF 10% 50V	C9558	1-107-826-11	CERAMIC CHIP	0.1μF 10% 16V
C9514	1-126-394-11	ELECT CHIP	10μF 20% 16V	C9559	1-126-394-11	ELECT CHIP	10μF 20% 16V
C9515	1-126-394-11	ELECT CHIP	10μF 20% 16V	C9560	1-126-246-11	ELECT CHIP	220μF 20% 4V
C9516	1-107-826-11	CERAMIC CHIP	0.1μF 10% 16V	C9561	1-100-756-91	CERAMIC CHIP	0.047μF 50V
C9517	1-126-394-11	ELECT CHIP	10μF 20% 16V	C9562	1-127-692-11	CERAMIC CHIP	10μF 10% 16V
C9519	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V	C9563	1-126-394-11	ELECT CHIP	10μF 20% 16V
C9521	1-162-964-11	CERAMIC CHIP	0.001μF 10% 50V	C9566	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V
C9523	1-162-964-11	CERAMIC CHIP	0.001μF 10% 50V	C9570	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V
C9524	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V	C9571	1-126-394-11	ELECT CHIP	10μF 20% 16V
C9525	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V	C9575	1-162-970-11	CERAMIC CHIP	0.01μF 10% 25V
				C9576	1-126-394-11	ELECT CHIP	10μF 20% 16V
				C9578	1-162-916-11	CERAMIC CHIP	12pF 5% 50V
				C9579	1-162-916-11	CERAMIC CHIP	12pF 5% 50V
				C9583	1-107-826-11	CERAMIC CHIP	0.1μF 10% 16V
				C9584	1-100-566-91	CERAMIC CHIP	0.1μF 10% 25V



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C9585	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V			<u>FILTER</u>			
C9586	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V						
C9587	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V	*	FL9501	1-813-308-11	INDUCTOR	0μH	
C9588	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V	*	FL9504	1-813-308-11	INDUCTOR	0μH	
C9589	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V	*	FL9505	1-813-308-11	INDUCTOR	0μH	
						*	FL9506	1-813-308-11	INDUCTOR	0μH	
C9623	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V						
C9824	1-162-919-11	CERAMIC CHIP	22pF	5%	50V			<u>IC</u>			
C9825	1-162-919-11	CERAMIC CHIP	22pF	5%	50V						
C9826	1-162-919-11	CERAMIC CHIP	22pF	5%	50V						
C9828	1-126-394-11	ELECT CHIP	10μF	20%	16V		IC9500	6-706-257-01	IC		FMS6418AM16X
							IC9502	6-704-819-01	IC		CS4335-KSZR
							IC9503	6-704-407-01	IC		PQ1CZ41H2ZPH
C9830	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V		IC9504	6-704-001-01	IC		BR24L02F-WE2
C9831	1-126-394-11	ELECT CHIP	10μF	20%	16V		IC9505	6-704-499-01	IC		SII9993CTG100
C9832	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V						
C9833	1-100-566-91	CERAMIC CHIP	0.1μF	10%	25V		IC9506	6-703-042-01	IC		CD4052BNSR
C9835	1-100-588-21	ELECT CHIP	1000μF	20%	6.3V		IC9509	6-550-014-01	TRANSISTOR		SSM6N15FU(TE85R)
							IC9514	8-759-331-71	IC		NJM4558E(TE2)
C9836	1-126-394-11	ELECT CHIP	10μF	20%	16V		IC9517	6-804-888-01	IC		MB89P965APFV1-G-120-BNDE1
C9839	1-126-394-11	ELECT CHIP	10μF	20%	16V		IC9521	8-759-642-22	IC		UPC29M05T-E2
C9841	1-100-118-21	ELECT CHIP	82μF	20%	16V						
C9842	1-137-897-21	ELECT CHIP	150μF	20%	4V						
C9843	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V						
								<u>JACK</u>			
						J9503	1-794-623-11	JACK, PIN		2P	



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
RESISTOR						R9559	1-216-809-11	METAL CHIP	100	5%	1/10W
R9501	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R9560	1-216-864-11	SHORT CHIP			
R9502	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R9562	1-216-809-11	METAL CHIP	100	5%	1/10W
R9505	1-216-841-11	METAL CHIP	47K	5%	1/10W	R9563	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W
R9506	1-216-864-11	SHORT CHIP				R9564	1-216-837-11	METAL CHIP	22K	5%	1/10W
R9507	1-216-857-11	METAL CHIP	1M	5%	1/10W						
						R9565	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9508	1-216-857-11	METAL CHIP	1M	5%	1/10W	R9566	1-216-864-11	SHORT CHIP			
R9509	1-216-857-11	METAL CHIP	1M	5%	1/10W	R9569	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9510	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R9572	1-216-837-11	METAL CHIP	22K	5%	1/10W
R9511	1-216-803-11	METAL CHIP	33	5%	1/10W	R9574	1-216-809-11	METAL CHIP	100	5%	1/10W
R9512	1-218-665-11	METAL CHIP	75	0.50%	1/10W						
						R9575	1-216-809-11	METAL CHIP	100	5%	1/10W
R9513	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R9576	1-216-857-11	METAL CHIP	1M	5%	1/10W
R9514	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R9577	1-216-857-11	METAL CHIP	1M	5%	1/10W
R9515	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R9580	1-216-809-11	METAL CHIP	100	5%	1/10W
R9516	1-218-665-11	METAL CHIP	75	0.50%	1/10W	R9581	1-216-809-11	METAL CHIP	100	5%	1/10W
R9517	1-218-665-11	METAL CHIP	75	0.50%	1/10W						
						R9582	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9518	1-216-857-11	METAL CHIP	1M	5%	1/10W	R9584	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9519	1-216-803-11	METAL CHIP	33	5%	1/10W	R9585	1-216-809-11	METAL CHIP	100	5%	1/10W
R9520	1-216-816-11	METAL CHIP	390	5%	1/10W	R9586	1-216-809-11	METAL CHIP	100	5%	1/10W
R9526	1-218-716-11	METAL CHIP	10K	0.50%	1/10W	R9592	1-216-809-11	METAL CHIP	100	5%	1/10W
R9528	1-216-837-11	METAL CHIP	22K	5%	1/10W						
						R9595	1-216-817-11	METAL CHIP	470	5%	1/10W
R9529	1-216-850-11	METAL CHIP	270K	5%	1/10W	R9597	1-216-803-11	METAL CHIP	33	5%	1/10W
R9530	1-216-821-11	METAL CHIP	1K	5%	1/10W	R9602	1-216-809-11	METAL CHIP	100	5%	1/10W
R9531	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R9606	1-216-864-11	SHORT CHIP			
R9532	1-218-694-11	METAL CHIP	1.2K	0.50%	1/10W	R9611	1-216-864-11	SHORT CHIP			
R9533	1-216-825-11	METAL CHIP	2.2K	5%	1/10W						
						R9612	1-216-864-11	SHORT CHIP			
R9534	1-218-686-11	METAL CHIP	560	0.50%	1/10W	R9614	1-216-809-11	METAL CHIP	100	5%	1/10W
R9535	1-216-845-11	METAL CHIP	100K	5%	1/10W	R9615	1-216-809-11	METAL CHIP	100	5%	1/10W
R9538	1-218-823-11	METAL CHIP	100	0.50%	1/10W	R9616	1-216-809-11	METAL CHIP	100	5%	1/10W
R9539	1-216-821-11	METAL CHIP	1K	5%	1/10W	R9623	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9540	1-216-829-11	METAL CHIP	4.7K	5%	1/10W						
						R9624	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9541	1-218-694-11	METAL CHIP	1.2K	0.50%	1/10W	R9625	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9542	1-216-850-11	METAL CHIP	270K	5%	1/10W	R9626	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9543	1-218-686-11	METAL CHIP	560	0.50%	1/10W	R9627	1-216-809-11	METAL CHIP	100	5%	1/10W
R9544	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W	R9850	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9546	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W						
						R9851	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9547	1-216-845-11	METAL CHIP	100K	5%	1/10W	R9852	1-218-644-11	METAL CHIP	10	0.50%	1/10W
R9548	1-218-716-11	METAL CHIP	10K	0.50%	1/10W	R9853	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9552	1-216-817-11	METAL CHIP	470	5%	1/10W	R9854	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9555	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W	R9860	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W
R9556	1-216-829-11	METAL CHIP	4.7K	5%	1/10W						
						R9864	1-218-701-11	METAL CHIP	2.4K	0.50%	1/10W
R9557	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W	R9866	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9558	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R9867	1-216-821-11	METAL CHIP	1K	5%	1/10W
						R9868	1-216-833-11	METAL CHIP	10K	5%	1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
R9869	1-216-833-11	METAL CHIP	10K 5% 1/10W	*	4-102-197-01	CARTON, INDIVIDUAL (KV-27HS420 ONLY)	
R9882	1-218-665-11	METAL CHIP	75 0.50% 1/10W	*	4-102-200-01	CARTON, INDIVIDUAL (KV-32HS420 ONLY)	
R9884	1-218-665-11	METAL CHIP	75 0.50% 1/10W	*	4-102-204-01	CARTON, INDIVIDUAL (KV-36HS420 ONLY)	
R9885	1-218-665-11	METAL CHIP	75 0.50% 1/10W	*	4-103-041-01	CARTON, INDIVIDUAL (KV-29DRC420 ONLY)	
R9886	1-218-665-11	METAL CHIP	75 0.50% 1/10W	*	4-102-097-01	CUSHION, (FRONT) UPPER (KV-34HS420 ONLY)	
R9887	1-218-665-11	METAL CHIP	75 0.50% 1/10W	*	4-102-201-01	CUSHION, (FRONT) UPPER (KV-32HS420 ONLY)	
R9888	1-218-847-11	METAL CHIP	1K 0.50% 1/10W	*	4-102-205-01	CUSHION, (FRONT) UPPER (KV-36HS420 ONLY)	
R9890	1-218-665-11	METAL CHIP	75 0.50% 1/10W	*	4-102-098-01	CUSHION, (REAR) UPPER (KV-34HS420 ONLY)	
R9891	1-216-809-11	METAL CHIP	100 5% 1/10W	*	4-102-202-01	CUSHION, (REAR) UPPER (KV-32HS420 ONLY)	
RESISTOR BRIDGE				*	4-102-206-01	CUSHION, (REAR) UPPER (KV-36HS420 ONLY)	
RB9500	1-234-524-21	RES, CHIP NETWORK 33	(3216)	*	4-102-095-01	CUSHION, LOWER (KV-30HS420 ONLY)	
RB9510	1-233-576-11	RES, CHIP NETWORK 100	(3216)	*	4-102-099-01	CUSHION, LOWER (KV-34HS420 ONLY)	
RB9511	1-233-574-11	RES, CHIP NETWORK 10	(3216)	*	4-102-199-01	CUSHION, LOWER (KV-27HS420, 29DRC420 ONLY)	
RB9512	1-233-574-11	RES, CHIP NETWORK 10	(3216)	*	4-102-203-01	CUSHION, LOWER (KV-32HS420 ONLY)	
RB9517	1-236-908-11	NETWORK RESISTOR(CHIP)	10K	*	4-102-207-01	CUSHION, LOWER (KV-36HS420 ONLY)	
VARISTOR				*	4-102-094-01	CUSHION, UPPER (KV-30HS420 ONLY)	
VD9500	6-500-701-01	DIODE	PGB1010603NR	*	4-102-198-01	CUSHION, UPPER (KV-27HS420, 29DRC420 ONLY)	
VD9501	6-500-701-01	DIODE	PGB1010603NR				
VD9502	6-500-701-01	DIODE	PGB1010603NR				
VD9503	6-500-701-01	DIODE	PGB1010603NR				
VD9504	6-500-701-01	DIODE	PGB1010603NR				
VD9505	6-500-701-01	DIODE	PGB1010603NR				
VD9506	6-500-701-01	DIODE	PGB1010603NR				
VD9507	6-500-701-01	DIODE	PGB1010603NR				
VD9518	6-500-701-01	DIODE	PGB1010603NR				
VD9519	6-500-701-01	DIODE	PGB1010603NR				
CRYSTAL							
X9501	1-767-984-21	VIBRATOR, CRYSTAL					
ACCESSORIES AND PACKING							
*	2-059-745-01	BAG, PROTECTION (KV-27HS420, 29DRC420 ONLY)			4-102-732-21	MANUAL, INSTRUCTION (ALL EXCEPT KV-30HS420, 34HS420)	
*	2-067-077-01	BAG, PROTECTION (KV-30HS420, 32HS420, 34HS420 ONLY)			4-102-735-21	MANUAL, INSTRUCTION (KV-30HS420, 34HS420 ONLY)	
*	4-066-646-02	BAG, PROTECTION (KV-36HS420 ONLY)					
*	4-102-093-01	CARTON, INDIVIDUAL (KV-30HS420 ONLY)					
*	4-102-096-01	CARTON, INDIVIDUAL (KV-34HS420 ONLY)					
				REMOTE COMMANDER			
				1-478-709-11	REMOTE COMMANDER RM-Y197		
				4-978-977-01	BATTERY COVER (for RM-Y197)		

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

English
2004EJ74WEB-1
Printed in USA
© 2004.5

In an effort to reduce the size of this pdf file the tiled schematics are not attached to this Service Manual. To receive a complete set of the tiled schematics for this manual please submit a request to the Service Promotion group at Service_Promotion@am.sony.com.